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FIVE IN A ROW

VOLUME 4 FOR AGES 7-8

BY

JANE CLAIRE LAMBERT

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Five in a Row, Volume 4 - Ages 7-8
is lovingly dedicated to...

... my husband Stephen
and my daughters Becky and Carrie
who all worked so far beyond the call of duty

...to Lynn and Carol
who have faithfully stood beside us

... and to all the children
who have loved their rowing experiences!

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Welcome to the World of *Five in a Row* for Ages 7-8

Good books have always been the doorway to learning. That doorway leads to growth and an appreciation for the wonders around us. Come along on a learning adventure using picture books to open the door to art, history, vocabulary, geography, science, human relationships, math and writing!

No matter how young, children get a substantial educational head-start from books, and *Five in a Row* has been created to bring excitement and fun to learning and to enrich children's lives. These lesson plans are simple in concept, but rich in results. Read the chosen book in its entirety several days as you study. After each reading, choose an exercise to share with your student, and watch their world expand as you begin to show them facets of the story they would never have recognized without your purposeful guidance. As a teacher of this material, you will find that you become excited and interested in a variety of subjects too. You'll **rediscover the joy of learning** and you'll build a special bond between you and your student as the two of you go on a learning adventure together.

This curriculum is intended to be extremely flexible, allowing you the option to do any or all of the exercises for each story. You may elect to skip over certain exercises which do not fit the needs of your student and you may place additional emphasis on certain exercises which seem appropriate. You will find more exercises than you can use in a week, so enjoy choosing just the right lesson elements for your students.

You can adjust classroom time to fit your needs as well. By using only one lesson element each day, you can work through *Five in a Row* in as little as 45 minutes daily, including the time to read the book.

The technique of reading the same story for several days in a row is one that I have tested in teaching for more than eight years. I continue to be amazed at the effectiveness of this technique! Each book will become like a special friend to the children. They will remember more and more about the story, but more importantly, they will begin to think more as they begin **wondering** how certain portions of the story came to be, or how the characters solved a certain problem. These results could never be achieved in just one reading.

Students will see how the illustrator accomplished certain effects and they'll be encouraged to begin exploring those techniques in their own art. You'll see your students learning about science, math, and history by the things you bring to the discussion every day. Your students will have the opportunity to try new activities they read about, or to learn more about a variety of people, places or animals. You'll also discover them asking more questions than ever before. By the end of the week, a new book will have become their friend for life.

Perhaps the most valuable benefit of using *Five in a Row* is that your students learn to completely **critique** a work (with your guidance), and that skill will serve them well as they continue reading more difficult books. Your students will begin looking to see whether a book is a Caldecott or a Newberry medal winner. They'll quickly classify a new book as either fact or fiction. They'll be able to articulate the point of view from which the story has been written. They will know about a wide variety of literary techniques and learn to recognize them for themselves. You'll be delighted when your students begin to evaluate the illustrator's medium and technique.

All of this is imparted in an exciting, enjoyable learning environment. Students think you are just reading them a book, but they are learning so much every day! The more lessons you do together, the more skills your young students will acquire; skills which will benefit them through high school, college and throughout life!

Welcome to the wonderful world of *Five in a Row*. You are the **leader** for this adventure, so gather the children around you and have a great time!

Jane Claire Lambert
July, 2002

"The goal of our instruction is to lead children to fall in love with good books and to embrace the joy of learning."

About the Books Themselves

Sutherland and Arbuthnot write in *Children and Books*, "Aesthetic satisfaction comes to small children as well as to adults, and the development of their taste depends not only on their initial capacities but also on the material they encounter and the way in which it is presented."[8] (emphasis added)

If you're like most of us, you can directly attribute a lifelong interest in at least one topic to the quality and creativity with which some particular teacher or a parent introduced the subject to you as a child. Likewise, you may well have nurtured a lifelong distaste for certain subjects for the same reason; an unpleasant early experience.

Sutherland and Arbuthnot go on to suggest that by selecting excellent children's literature and reading it together each day, children have the opportunity to "catch a new theme, savor the beauty, the subtle humor or a special meaning that eluded them at first."

"Sometimes," the authors suggest, "an adult has the privilege of seeing this discovery take place. The children's faces come suddenly alive; their eyes shine. They may be anticipating an amusing conclusion or a heroic triumph. There is a sudden chuckle or breath is exhaled like a sigh. The book has moved them, perhaps even to laughter or tears, in any case there is a deep inner satisfaction and they will turn to books again with anticipation."

Sutherland and Arbuthnot conclude, "Once they have experienced the joy of reading they have acquired a habit that will serve them all their lives. It is important, therefore, that those who guide their reading select wisely."

It is within this context that the titles for *Five in a Row* have been chosen. In each case content was of supreme importance. Books were chosen that showcase close family relationships, personal triumphs, and persevering in times of trial. There are books with people characters and stories with animal characters, but in all the stories the characters touch the reader's heart and demonstrate life's truths. Please remember, however, that our selection of a particular title by an author **does not mean that we endorse everything from that author**. We're aware of several cases where authors have written marvelous books and very questionable books as well. Please take the time to **review** any book you bring home from the library before reading it to your children!

In addition to content, the books also cover a wide range of artistic expression: the vibrant watercolor illustrations of the southwest by Joyce Rossi, the exaggerated humor in the figures of Brad Snead, the warm use of color by Jim LaMarche, the rich stylized work of Jeanette Winter, as well as the beautiful wood block art of Caldecott winner Mary Azarian. Each title was selected for its magnificent art, beautifully rendered for the utter appreciation and enjoyment of children. Art to appreciate; art to learn from and **art to be remembered for a lifetime!**

It has been said some stories must be talked over or listened to while someone who knows and loves them reads aloud.* (emphasis added) If you come to love the stories your student will too.

With these standards in mind we hope you and your student find a special place in your heart for these stories and for the concept of *Five in a Row*.

*Sutherland and Arbuthnot, *Children and Books,* Harper Collins Publishers, 8th ed., 1991. How to Use *Five In a Row*

Great Ideas for Getting the Most Out of *Five in a Row* Volume 4, Ages 7-8

Select a book to study with your student. There is no right or wrong order for covering the material. Some of the books have overlapping lesson material and there are references to remind your student when he is studying one book, of other books' lessons in the volume that have a similar theme, or art work, or lesson topic.

Some teachers will choose to purchase each book as a valuable addition to their permanent library. Of course, any public library should have (or be able to request) each of the titles in this book. (See "Finding the Books" in the Appendix for more information.)

Important Note! Please take the time to **read the book aloud** with your student at least several times in your week or two of study. Some repetition is essential to your student's learning process, and the time you spend reading together is just as important as the lesson material itself. Each time you read the story your student will hear the words of great authors, see the amazing art work of wonderful expressive artists, and be able to think about the lessons you have previously taught during the week as he hears the story once again.

In the Appendix, you will find a **sample planning work sheet** for *Snowflake Bentley.* You'll also find a blank work sheet which you can reproduce and use for each FIAR story you study. The sample sheet shows how to correlate the teacher's guide suggestions and plans to the five days of the week you will study each particular book. In most of the books' lessons there are several weeks of learning topics to explore. It is your choice to study a book two weeks in a row, or to do one week and return later for another. On this sheet you can pick and choose which lessons you want to do and list them according to the days of the week. Or, feel free to design your own worksheet. Some teachers don't care to use planning sheets at all. They work directly from *Five in a Row* manual. Do whatever works for you!

Notice the sample lesson plan is outlined briefly and gives you a quick reference for the week. Not every lesson suggested in the Teacher's Guide under **Snowflake**

Bentley is listed on the sample lesson. This is because there are too many lessons in the teacher's manual for one week. So you may choose the ones that are especially suited to your student and list them on the blank planning sheet. The subjects Math, Science, Art, etc., do not have to be used in the same order every week. The plan is completely yours. Use only the subjects and topics you wish. Remember when planning, that within a class week, the curriculum builds on itself. Whatever you study on Monday will be recognized by your student when you read the story again on Tuesday. When you read the story a third time on Wednesday, the lessons you introduced on Monday and Tuesday will not escape the student's notice as he hears or sees the examples again. So each lesson, except the one for Friday, gets at least one review and some lessons get four reviews. The topics you think are most important, therefore, should be scheduled toward the beginning of the week. It seems as though Art often gets tagged in the Friday slot. Try using this topic earlier in the week, perhaps on Wednesday, so your student can study the pictures for several days as he hears the story read and reread.

Also at the back of your manual you will find a sheet of hand colored, laminated story disks. These may be used to make a Literary Map. Carefully cut out the disk and put the name of the book on the back of the disk. You will need a large map of the world (a laminated map is more durable) and a laminated map of the United States would be helpful, as well. By placing a Velcro® dot on the disk and the other dot on the map where it goes, you can quickly take it off and put it back on each day. Teacher's tacky putty will also work, and you or the student can locate the country or state for the story disk and attach it daily. Eventually you will be able to track the stories you have read all over the world. Even young students will learn a great deal of map basics. Any **stories that have fictitious settings** can be placed in the margins of the map designated as the **"Land of Make Believe."**

Social Studies

Because there are only five subject categories (to correspond to the five days of the week), many different topics are included under Social Studies. Each story presented has been identified according to the geographic area. Through the lessons and the stories you will explore states like Wisconsin, Vermont, Montana, Missouri, as well as countries like Australia, with all its variety, and places like the Great Barrier Reef, Hungary, Italy, Japan, and Mexico. Often the **culture** of that area is discussed. Making a **flag** for countries or states is recommended as an interesting and informative activity. **Geography** also includes the mention of oceans, continents and geographic regions. (An excellent illustrated children's geography book is *Rand McNally's Picture Atlas of the World*, illustrated by Brian Delf. You'll find it informative and fun!) Under the topic Social Studies, you will also find lessons about cities, small town life, government, adoption, occupations, and running a small business. In addition, the Social Studies unit includes **History**. Under this heading, you will see lessons which create opportunities to discuss the writing of the Declaration of Independence, the Old West, to learn about Native Americans, to study Ancient and Modern day Rome, and World War II as it relates to the country of Hungary. Social Studies also includes several lessons about people and their **relationships** to one another. In this category, you'll find subjects such as fathering, self-image, steward

ship, friendship, taking responsibility, envy, jealousy, forgiveness, manners, and generational ties, just to name a few. As you can see, a wide variety of subjects is included under Social Studies.

Choose the topics you'd like to discuss and either mark them in your *Five in a Row* manual or write them on the Planning Sheet under whichever day it seems best to cover them. If you use the Planning Sheets, be sure when presenting the material, to tie it in to the story. Finally, in the Geography section of Social Studies, you'll find the directions for **placing the geography disk** for each book you read.

Language Arts

There are many techniques for learning Language Arts using children's literature. Increasing vocabulary, learning literary devices, learning list-making skills, composing short stories, and acting out dramas are just a few of the ways. Teaching Language Arts is a natural extension of the enjoyment of children's literature.

Vocabulary is enriched by hearing new words like piazza and recouperation (from *Angelo*), formulated and lanky (from *The Pumpkin Runner*), elegant, parchment and cobblestone (from *The Hatmaker's Sign*), commence (from *The Hickory Chair*) or haiku and oxidation (from *Grass Sandals*). **A child's vocabulary is much greater that just the words he can read or spell,** and reading a story which contains new words five times in a row will help increase his recognition and understanding of those words.

Two methods for **organizing vocabulary words** are the file box and the notebook. The file box method uses four by six inch, unlined index cards with alphabet dividers. Either the teacher or the student can print the word at the top left of the card. Write in a short definition at the left and either draw an illustration, or cut a picture from a magazine to show the word visually. Keep the words alphabetized and encourage your student to go through the cards frequently. This will help him remember which story each word was from. (To help in remembering the source, write the name of the book on the back of the card.)

A second method of keeping track of vocabulary words is to list them on a page in the Language or Vocabulary section of a notebook. Print the word (large, if necessary) and illustrate with a drawing or magazine picture as a visual reminder. Each list could be alphabetized. Review these words from time to time while remembering your favorite incidents in the corresponding stories.

A **notebook** is good for more than just vocabulary words. In fact, it's a great way for a student to keep his work organized and ready for quick review and easy reference. A notebook is more creative and leaves room for each child's personality and presentation style. The academic content in vocabulary, science, history, art, etc., will be much the same as in any workbook, but a personal notebook with hand-created labels and decorations is a treasure forever.

List-making is another Language Arts skill that develops vocabulary, memory, associations and creativity. It is also a skill that has lifetime value in many different areas, from grocery lists, lists of people to invite to a party, "to do" lists, lists of ways to solve a problem, to descriptive lists that inform. There have been great eloquent lists made by famous people of the things they liked, disliked, or the things they wished for. Once, while travelling together in a car, a friend's family began an oral list of methods of transportation. Many miles down the road, the list had grown to gigantic proportions with the hilarious inclusions of walking on stilts and walking on your hands added to the regular methods of riding in a car, bus, taxi, etc. What began as a list-making exercise became entertainment. The art or skill of good list-making is included in this curriculum to provide both a learning experience and a good time.

There are many literary devices explained in this book and tied in to the lessons from children's literature. You probably will not cover them all, but they are included to remind the teacher of them and give opportunities for casual inclusion in the reading lessons.

As you come to each new literary device, a list can be made with examples and pictures. Keep your list in the Language section of the student's notebook. For instance, personification (giving human qualities to non-human things) might be defined and illustrated with a magazine picture of the Pillsbury Doughboy® which depicts a lump of dough made into a person. There are many examples of Personification in such pictures. The other devices can be illustrated, as well. Keeping a chart or list of these words makes review easy and interesting and can be used by the student as an inspirational list when he is creating his own works.

Ideas for leading your student into writing include letting him tape record his stories, which you then transcribe. Often the student will enjoy listening to his own story tape. Writing rebus stories, where a picture takes the place of a certain word throughout the story, is an interesting way to begin writing skills. As you follow the curriculum, you'll find lessons in what makes a good story, and ways to achieve variety. Your student will begin to appreciate the choices an author makes to create a story and the careful thought that goes into writing.

Many times in this curriculum these types of **questions** are asked: "How does the author make the story exciting? What words does he use? How does he ...?" As your student ponders these questions he understands how the authors write their stories. Eventually, as he sees these techniques modeled before him, the student will begin to include such elements in his own writing. The suggestion after every lesson to imitate an aspect of the author's work is optional, depending on the interest and abilities of the student. See if your student enjoys imitating the author's techniques. If not, just concentrate on appreciating the lesson. In time the rest will follow.

If, however, your student enjoys writing "after the manner of," **imitating** aspects of the author's story, he will like the suggestions to try a fable, an instructional story or a poem. He'll also begin to include a good setting, interesting characters, an exciting climax, or an important denouement (final outcome of story) in his *own* stories. Each of these is a separate lesson in the curriculum. Again, keeping a chart or a good notebook *list* filled with defini

tions and examples will give your student ready reference when he is writing his own stories and makes review easy. Just add to the list or chart on an on-going basis as you come to different lessons. You might title the chart or list: **Choices A Writer Can Make.**

Remember, there are too many language topics to be covered in a single day. Choose the ones appropriate for your student and jot them briefly on the planning sheet under the day you think best. Remember, if you are going to teach vocabulary it is a good idea to do this at the beginning of the week, perhaps on Tuesday. As the book is read and re-read throughout the week, your student will see familiar vocabulary words again and again, providing a built-in review. Choose only a few words from each story.

Art

When you choose good children's literature, you will frequently discover exceptional illustrations, as well. Watercolor, pastels, charcoal, beautiful colors, active lines, funny characters, and balanced compositions are all parts of fine illustrations for children. Furthermore, they can be used to introduce even young children to fundamentals and techniques of art.

Appreciating art is learning to recognize the many techniques and concepts which combine to produce effective art while learning what you like and why. Some pictures have a rhythm, balance and choice of color that combine to make them pleasing. Some illustrations are meant to evoke strong emotions or to provide information. Even young children can begin to identify great art wherever it's encountered. They'll also begin to know why they like it. By teaching about the artist and their methods, your student's taste in art will expand to include a rich and wonderful variety of work.

As you look at illustrations with your student, ask "What do you think the illustrator used for his medium?" Sometimes it's hard to tell. There are combinations of pen and ink with water color washes, etchings with strokes from oil or acrylic, and the wet, transparent blends of watercolors. Look for the shading in a charcoal or pencil sketch, or the build up of color by successive layers of colored pencils. Learn to identify the deep texture of pastels.

After you've discussed the medium, ask "why and how" questions. "Why do you think the illustrator chose this medium, color, style, view point, etc.? How did the artist make it look like night time, etc.?" These kinds of questions will open a doorway to art appreciation for your student.

Let him study the illustrations as he tries to answer your questions. You may want to suggest some answers as you discuss the methods the artist used and how the illustrations help tell the book's story. Does the artist's work provide additional story information not included in the text? Does the choice of color palette convey the tone of the story?

Asking lots of **questions** will cause your student to look with a more critical eye. He will pore over the pages to find answers and he will gain a love of art based on

newly-discovered information. This will lead to an emerging appreciation for great illustrations. Don't ask all the questions at the same time. Bring them up conversationally from time to time as you study each book.

One of the best techniques for teaching art fundamentals is to imitate a particular technique from the painting or drawing of a known artist. In *Five in a Row*, the lessons attempt to identify and single out a specific artistic element and to **encourage imitation.** Your student will be invited to mimic specific styles, colors, designs, etc. Remember that appreciation usually precedes imitation. Therefore, look for examples of the element you are studying in other books, magazines, etc. Let him examine and enjoy these additional examples before he begins experimenting with the technique himself.

In order for you to be ready to meet your student's needs, you may want to have certain supplies on hand. This is a very **simple list of items** that you can slowly accumulate--items that will encourage your young artist at every turn by their variety and quality.

Kneadable eraser	An eraser that can be shaped to get into tight spaces, and that does not make as much "eraser crumb" mess as some erasers do
Drawing pencil or #2 lead pencil	
Charcoal	(Teacher's Note: Supervise the use of charcoal, since it can get messy!)
Oil pastels	The favorite medium of many young students. They don't smear as much as chalky pastels. (Adult supervision required.)
Markers	Because these cannot be blended and mixed, there needs to be a varety of bright colors.
Colored pencils	Look for good colored pencils. They make a difference.
Crayons	
Water colors	Prang® brand is good, or tube water colors are extremely easy to use for mixing exercises.
Acrylics	Not necessary, but it gives your student a chance to paint layer upon layer using lighter colors on top.
Brushes	You'll need brushes with several different bristle lengths and widths. If you want to paint fine-lined tree branches, you'll need the right brush!

Water color paper	Comes in different textures, purchase a few sheets of smooth and rough textured paper for experimentation

Canvas paper for acrylics

Drawing tablet or paper

Tracing paper

Ruler

Templates of various geometric shapes cut from cardboard.

Above all, remember that creative art is an **intensely personal subject.** If you wish to demonstrate a technique, do it on a separate piece of paper-never on your student's own work! Be wise with your criticism of his progress. Grant him the respect you would grant any artist. Go slowly, letting him catch the enthusiasm for the ideas you present.

Math

In many of the books chosen for this curriculum, students will enjoy finding practical ways to use the new concepts they learn in math.

The concept of relative size, measuring, time, and money are all found in the stories of children's picture books. A book about quilts offers a chance to talk about geometric shapes. Because the concepts are linked to an enjoyable story, your student will remember the concepts with pleasure.

If time is available, especially in the summer before school starts, make math manipulatives using ideas from the story illustrations. For instance, if you are going to read a book for a week that is about trains, make flash cards with the facts printed inside train cars. Use bright cheerful colors and write the answers on the back. Laminating the cards will help them last. The cards can also contain any term or newconcept on one side with the definition on the other.

Reading the lesson story all the way through while enjoying the closeness of the teacher and the entertainment of the book establishes a good environment for presenting a math lesson derived from the story. Even the lesson will be a shared experience. If there are more math ideas than are appropriate for one day, choose just the ones you wish to cover and write them on the planning sheet for the day you wish to cover Math.

Science

Open wide the door to children's literature and find within the stories a vast array of scientific educational potential; from gazing at the stars and wondering about our sun, to discovering shadows and reflections, insect growth, how a lever works, volcanoes, buoyancy, oxidation, evaporation, pollution, seasons, nutrition, animal behavior and much more.

After reading the book for the day, bring up conversationally the science topics suggested in the lessons and other ideas that you may have. Don't try to use all the topics. Lessons for *The Raft* by Jim LaMarche, for instance cover science topics such as animals such as the muskrat and the badger, the science of fishing, conifer and deciduous trees, north woods wildlife including the beginnings of the Classification System for Animals, as well as ways of seeing under water! Just choose the ones you think are appropriate or ones that you wish to cover at this study of the book, and mark them on the planning sheet on whichever day seems best.

When presenting your science lesson, be sure to **tie it into the place in the story.** For instance, in *The Raft*, you might say, turning to the first page, "Look at all the animals, birds, fish and insects Nicky learned about in his summer in the woods. Let's go through the illustrations and make a list of them. Then we're going to learn where some of these animals fit in the Animal Kingdom…it will be sort of like fitting pieces in a puzzle, to place them all in their own particular spot."

A science section in your **student's notebook** with a page for Ocean Life, a page for Simple Machines, and a page for Animal Classification, for example, will help in reviewing lessons he has studied. If he likes, let your student illustrate the topics with his own drawings of the story. The individuality and creativity of this type of organizing of his completed work, could become a treasured notebook by year's end. A notebook your student will be proud to keep and proud to share with others.

Teacher's Note: Throughout *Five in a Row* you'll find students referred to as "he". Obviously, this is strictly a literary convention to avoid cluttering the book with hundreds of, "he and or she" clauses! *Five in a Row* was created to be gender-neutral and you'll find hundreds of fascinating lessons to appeal to both boys and girls. And, please note that we've referred to "teacher and student" in the singular. Many of you will have more than one student. Another item of note is that throughout the lessons, some words have been defined within parentheses. This is done to remind teachers of very young students that even seemingly common terms may have to be explained!

What Kind of a Bible Study is *This*?

*(If you have not used *Five in a Row* before, see notes at the end of this introduction.)*

Assuming that you have taught through the first three *Five in a Row* teaching manuals along with the *Christian Character and Bible Supplement,* you already know how these lessons work. Since we have been given the command to teach our children at all times of the day and night—when they get up and when they lie down, it is so precious to be able to do some of this teaching through discussing the characters and events of good books! **We can teach our children much the way Jesus taught the crowds around Him—with a wonderful story!**

Many children are greatly influenced by the positive principles and qualities of the characters in the books they read in their youth. It is so easy to say, "Look at how (story character) did such a good job taking care of his pet. He didn't let it get hungry or thirsty or lonely. Wasn't that wise of him? The Bible says that a wise man is kind to his animals."

It is important, too, to spend time emphasizing the wonderful rewards of living according to Biblical principles. You can continue, "This (story character) took such good care of his pet and look, the puppy loves him so much! That little dog wants to be close, and will do just about anything for him."

Reading any story where the characters are observing Biblical principles and watching specifically for the rewards or benefits that result, is a natural way for your student to learn that it is indeed in his best interest to be careful and wise in the way he lives.

But these lessons can be a blessing to you as well as your student. How many of you who have taught through the first three *Five in a Row* manuals have enjoyed the art lessons or the writing lessons not just for your children but for yourselves? I've had so many mothers send me pictures they have created while teaching art lessons to their children. They will say things like, "I haven't drawn anything since I was in grade school, but I did the lessons with my children and an entire new world of art is opening up to me. Here is my picture."

Others will write and say that the creative writing lessons have spurred them into new vistas in creative journaling or writing. Countless hundreds of moms have written to say that they personally are learning so much from the lessons in science, history, etc., that entire new worlds of ideas are opening up to them.

Well, in a way this same idea was in my heart when I wrote out the Bible study lessons. I was hoping that you, as a teacher, would use the supplement first of all for *yourself!* I was hoping you might set aside a few minutes each day to read through the Bible lessons, and to look up each of Bible verses as a sort of *personal* study time. I

thought that the Lord would bless such time spent, excite you with a few new ideas and concepts, and touch the your heart as you drew near to Him. I hoped that you would find much encouragement for yourself—that the Lord would show you answers for your daily lives, and your own needs.

Then I thought that from the blessing and filling up you *personally* received through these studies you would be able to choose a small part of your *own* blessing to hand off to your students. Sort of like a baton in a relay race—the baton of faith!

It seems so important to help our children learn to draw the Bible into whatever they are doing. Thoughtfully tying the Bible lessons to their reading books is such an important factor in helping the children process Biblical truths and put them quickly into use right in their present-day lives. And just as it is good for our children, it can be good for *us* as well. In all things remember: Colossians 3:16 *(Look it up for yourself and be uplifted!)*

Blessings on your teaching journey,
Jane Claire Lambert

**(For those new to Five in a Row Christian character lessons)*

I hope that you enjoy the spiritual food you find as you work with this Bible study. But, I have just as great a hope that you will mercifully blow away any chaff you discover. I have prayerfully labored to be helpful, knowing that no work like this will be perfect.

For each Five in a Row story lesson you teach, you'll find an accompanying group of Bible references. I have tried to gather many references so that you might choose one or two that seem the most appropriate to you. Choose the verse or story that would most enhance the story lesson for your student.

You can teach each Bible concepts simply and conversationally. You might say, "You know children, the patience the little girl had in this week's story reminds me very much of a story in the Bible. Sit down here beside me and let's read from the book of Genesis about a man named Noah who had to be very, very patient."

Carefully consider the age and spiritual readiness of your student, to make the Bible lessons an enjoyable part of your Five in a Row study.

Bible Verse For Your Geography Lessons: Consider placing Psalm 113:4 above your map or by your globe when you mention the numerous countries included in Five in a Row Geography Lessons. Psalm 113:4 exalts God as Lord above every nation.

What's Cookin'?

In the *Five in a Row Cookbook* section that follows each story unit, you will find several important learning elements.

First, you will find a menu of recipes that correspond to each story's theme or geographic location, or that have specific reference in the week's story.

These are unusually delicious recipes--ones your entire family will enjoy as you prepare them and dine together, talking with one another about how the foods tie-in to this week's story.

Another important part of the cookbook is the help for "story tie-ins" found in the titles of the menu sets and in the opening italicized paragraphs.

For instance, when making the famous hamburgers (*The Raft*) you might ask, "Now, why do you think we are making hamburgers tonight? How do *they* go with this week's story?" And your child may reply, "Because Nicky didn't catch any fish the first time he tried, so they ended up eating *hamburgers!*"

Another example might come when you're making Chicken Paprikash. As you're preparing the meal you could say, "Why do you think we're making this particular meal after reading *Hanna's Cold Winter?*"

When your student sees the paprika on the counter he might say, "Oh! *Paprika*! That's what Timor's father did. He worked in a paprika factory!"

That's your chance to reply, "Yes! You're exactly right and this recipe is a traditional Hungarian meal that Timor, *himself,* might have eaten. We even bought mild-tasting Hungarian paprika for our recipe. Now let's decorate the table with the Hungarian flags we made and surprise your grandparents with our meal!"

The third component in the recipe collections is the "Chef's Corner" paragraphs. Here you will find a sort of "cooking school" with special tips, methods and skills that will make you and your student a better cook. It's a mini-chef's training course!

Tucked into some of the menu sets you'll also find supplementary ideas for music, decorations, etc. to enrich your special meal.

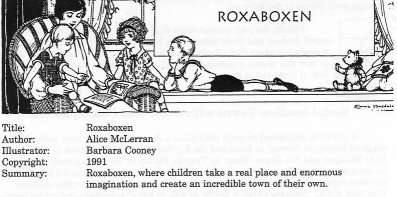
These meals are a wonderful opportunity to tell your student how proud you are of his work this week or how much you appreciate his cheerful, cooperative spirit all week. You may want to use this meal as an opportunity to have your student share something he did particularly well during the week, or something he really enjoyed doing. You could say, "You did such a wonderful job on your art project Wednesday. Would you mind bringing your project to the table and sharing it with your dad?"

Meals are also a great time to "preview" next week's story with a tantalizing teaser. You might say, "You know, when I was a little girl I used to love to play "town." My friends and I had a complete little village we made up in the backyard using old boxes and sticks. Next week I'm so excited because we're going to read a book about some children who did that very thing! It's called Roxaboxen and I can't wait to share it with you!"

You'll notice that there's a blank line before every recipe title. Encourage your children to personalize their cookbook pages by naming each recipe after a character, event or location in the week's story. They might decide to call the peach pandowdy recipe found in the *Cowboy Charlie* lessons "Montana Peach Pandowdy" and they might suggest calling the sarsaparilla "Charlie's Favorite Homemade Sarsaparilla." What fun!

Don't forget the blank space at the end of every recipe section. It's there so that you can jot down a few notes about your favorite learning experiences from the past week and perhaps even include a snapshot of the meal. Family photographs are a wonderful legacy of the learning experience. You'll enjoy looking back in the years to come, remembering the evening your whole family "went to Hungary" for dinner!

So what's cookin' in the *Five in a Row Cookbook* section? Memories galore as you and your family extend your story week study with foods from Japan, Italy, Australia, Hungary, Canada and throughout the United States. During these special times your student will learn kitchen cleanliness and safety, good nutrition, cooking technique, how to be part of a team, and how to take a big project to it's delicious conclusion. Teamwork, fun, great food, priceless memories are all yours with the *Five in a Row Cookbook* menus. That's "what's cookin'!"



Title:	Roxaboxen
Author:	Alice McLerran
Illustrator:	Barbara Cooney
Copyright:	1991
Summary:	Roxaboxen, where children take a real place and enormous imagination and create an incredible town of their own.

Social Studies: Geography - Arizona

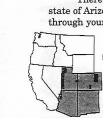
The author's text of *Roxaboxen* does not tell exactly where the story takes place. Perhaps this is the author's way of keeping Roxaboxen the universal play place—an extraordinary play place that could exist anywhere! Many authors choose to treat their settings in this manner. Talk with your older student about author's choices. One choice authors make is the setting of their story. Some writers choose to write their stories in the context of a real setting while some choose a fictional place. Yet there is still another option. A writer may also choose to never actually mention where a story takes place—either a real-life setting or a fictional one. Remind your student that he can make these same choices regarding *his* setting, as he writes *his* stories.

Only in the afterward of the book, do you find that the original Roxaboxen actually did exist in Yuma, Arizona! Find Arizona on the map and place your story disk there. Arizona is considered one of the Southwestern Sates. The terminology southwest generally refers to the state of Arizona, New Mexico, Texas and Oklahoma. Phoenix is the capital of Arizona, while Flagstaff, Tucson and Yuma are other important cities.

Arizona was the 48th state, admitted to the union of the United States of America in 1912. The name Arizona comes from an Indian word *arizonac* meaning small spring. In fact the names of twenty-five of our fifty states in the U.S. are named for Indian words or tribes! There are many Indian reservations in Arizona including a large Navajo reservation in the northeast corner of the state.

Arizona has many different kinds of cactus, lizards and snakes, as well as the spectacular Grand Canyon, and Monument Valley that includes the Painted Desert and Petrified Forest areas. Find a good travel video at your library and let your student see the interesting and magnificent sights of Arizona. (**Teacher's Note:** Be sure to preview the video and choose the portions you wish to present.)

There are many topics of interest for your older student to explore regarding the state of Arizona. A good encyclopedia will yield information and ideas for topics to explore through your library or the Internet.



Finally, did your student know that Arizona is one of the "Four Corner" states? Arizona and three other states, New Mexico, Colorado and Utah have a single boundary that all touch at a single point. Look at a map and discover how this works. A person can stand at one place and technically be in all four of these states at once!

Social Studies: Towns with Rules and Consequences

If you have progressed through the *Five in a Row* manuals you have probably explored lessons on "towns" in *Katie and the Big Snow* by Virginia Burton in Vol. 1 and in *Mike Mulligan and His Steam Shovel* by Virginia Burton in Vol 1. Roxaboxen also becomes a town with the addition of shops and homes, a mayor, police and a jail. Have you ever engaged in such wide scale pretending in your childhood? Has your student? This type of play promotes physical health as well as lots of enjoyment and actual learning experiences. Acting out scenes from life has always been an important part of playing pretend. If your student is interested (and especially if he has someone to create a town *with*) he could use large boxes to make store fronts and buildings for his town. Or he could just line out a town (outside with chalk or rocks and inside with pillows or tape) and use prepared signs to designate the buildings. He could pretend being a policeman, fireman, shopkeeper, etc.

Does your student think the town of Roxaboxen runs well? (It seems the inhabitants of Roxaboxen are happy living in their homes, buying and selling and driving everywhere. Except maybe for the times of war, in general, the town runs well, in an orderly and enjoyable way.) Does your student know what a mayor does? A mayor, usually an elected official, is the head of a city or town government or municipality. The mayor is responsible for conducting the business of the city, seeing to its laws as well as its growth and well being. Remember when Frances moved to a new house on streets that were added later? This is an example of town growth. Is there an area of new construction and growth near you where you student can watch over a period of time as his own town grows? As a town grows it needs more shops, police stations, fire stations, post offices, libraries, hospitals, disposal services, etc.

Explain the beginnings of town politics in this simple way: In the town of Roxaboxen (as well as in real towns) people get along with each other because there are some basic rules and people follow them. Most of the rules have to do with treating the citizens of the town just like you would like to be treated. This includes such conduct as keeping your word, and not harming other people or their property. If the rules are not followed there are consequences. The consequences usually consist of having to pay for something damaged or having to give up some of your own time, money, and/or freedom to repay a wrong done. The consequences exist to help people remember *not* to break the rules. Talk about the fact that it is this idea of consequences being a deterrent that makes Roxaboxen humorous when little Anna May is always speeding. The story says "you'd think she liked to go to jail." In real life it would be unusual for anyone to enjoy

being in jail, perhaps she just liked going fast. So, there are rules (or laws) to help keep order, and consequences like fines or jail for the public protection if someone cannot seem to keep the rules. The rules are set by the people of the town through the voting process.

Also, a town has a government structure with a person who acts as head of that government, usually called a mayor. Often the building where the mayor works is called the town hall. In *Roxaboxen*, Marian was the mayor, perhaps because she was the oldest or maybe because she had natural leadership skills. Are you more of a leader or a follower? How would your student describe himself in this area of relationships? How about others you know? What attributes do you and your student think make a good leader? A good follower?

Language Arts: Writing a Story from Third Person Point of View

Alice McLerran writes the story of *Roxaboxen* from the **third person point of view**. Your student has probably studied some of the *Five in a Row* story lessons on first person point of view in lessons for *Night of the Moonjellies* (FIAR Vol.1), *Owl Moon*, and *All Those Secrets of the World* (FIAR Vol.2), and *The Wild Horses of Sweetbriar* (FIAR Vol.3). If you have any of these books available read a few pages of the story to remind your student what first person point of view sounds like. Such a story is told by a character in the story using words like "I", "mine," or "it happened to me."

However, in *Roxaboxen* the story is *not* told by a character but rather by someone outside of the story. That someone is called the story's narrator. In other words someone outside the story is telling or narrating the story. Read some of *Roxaboxen* and then part of another story written in first person and see if your student can easily tell the difference. If your student is able to understand the difference, let him write a paragraph or short story from third person point of view like Alice McLerran did in *Roxaboxen*. But, if the lesson is still too difficult, let it be just an introduction to the idea of third person point of view.

Language Arts: Reading - Inferring, Wondering and Exploring

Marian digs up a box filled with black pebbles. Ask your student how he thinks the box of pebbles became buried. Where did they come from? Let him consider the question for a moment. (It could be a child from years ago had played in the same place and buried his box of treasured black pebbles. Unless Marian hid the box to find it and surprise everyone, no one else had known that the box of stones even existed. If they had, they would have said so.) You may never know exactly how the box of stones came to be there but isn't it fun to wonder?

Did you ever find a buried treasure of any kind? Has your student? We never know when, but if we are observant we may find something special, too. Has your student ever seen someone using a metal detector to find items buried beneath the ground or on the beach? Many types of items have been discovered in this manner!

Art: Inspiration and Memories

Don't miss the fact that Barbara Cooney took the, then eighty-year-old Frances back to Roxaboxen to help the illustrator imagine what Roxaboxen must have been like from a true Roxaboxenite! This information is found in the artists' information on the last page of the paperback book and possibly on the dust jacket of the hardback versions of *Roxaboxen*.

Discuss with your student how difficult it would have been for an artist to capture the wonder, color, action, excitement and imagination of Roxaboxen if she had never been there. Does your student think Barbara Cooney's pictures are better because she went to all the work to visit the actual site and listen to Frances' memories before she drew the pictures?

Artists often get inspiration from visiting a locale in person before writing a story. Maybe your student would like to pick a topic to write about—one where he can visit before he writes. For instance, if he wanted to write an article about fishing at a certain lake. He could visit the lake before he wrote the story. Or perhaps a new store he has wanted to visit could be the theme of his story. Have him outline what he thinks he might write about and then after visiting and writing, have him look back and see how much richer his work is because of the first hand visit.

If you have more than one student doing this assignment let them compare their work to notice what different things they each see at the site.

Art: Traditional Colors of the Southwest

With your student, spend a few minutes enjoying the picture on the title page. It is the one rich in the colors of the Southwest, mountains in the background and Ocotillo bushes on each side. Isn't it a beautiful picture?

Traditionally there are certain colors associated with the Southwestern states of the United States. In art, books on home decorating in the southwestern style, and in advertisements for products and places of the southwest you will often see some traditional colors used. These colors tend to be the colors Barbara Cooney uses on the title page illustration, the illustration showing the jail, and throughout the scenes of *Roxaboxen*. Often traditional colors of the southwest are rich in oranges, reds and terra cotta, browns, teal and dark blues, pinks and purples, sage and dark greens, which reflect the colors of the sunsets and dawns and the various plants which grow there.

If you have one of the large sets of crayons or a huge paint chart from artists watercolors or oils (from an art supply store), or a set of paint chips from a store that sells house paints, have fun trying to match the colors from Cooney's paintings to the sample colors or crayons. For added fun, use a large set of watercolors (sixteen pots—Prang makes such a set) and try mixing to obtain the colors you wish to match.

Again, as you and your student see examples of southwestern color combinations in art, advertising, decorating books and stores, stop and enjoy the colors and reminisce about the desert sunsets in *Roxaboxen*!

Art: Detail

By the end of the week your student may be able to look back at the cover of this story and now be able to identify the Ocotillo spears. Your reading student will perhaps see the flag that says Fort Irene.

Art: Design Your Own Roxaboxen

Even if you choose not to play pretend and set up a similar play town like Roxaboxen, your student might enjoy drawing such a town, designing the buildings and thinking about town growth. You could design your town in an aerial view as seen from above, or in perspective drawing with different pages for different directions. Your student could also have different pages to reflect the original site and then town growth in various stages. Let him design the town any way he wishes and have fun in that place of imagination!

Just as Frances designed her own space when she moved to her new house, your student can also do a drawing plan for just a single home space and decorate it any way he likes.

Math: Grouping, Borrowing and Skip Counting

Marion digs up a box filled with round black pebbles. Find some kind of round-ish black stones (gardening store or nature store), black beans, etc., and put them in a tin box. Let your student use these *Roxaboxen* units to work on appropriate math concepts. Math is more *fun* (that means easier to learn) when it is tied to something that stirs the imagination!

Math: Seasons - Numbers in Months and Days

Since Roxaboxen talks about the seasons, use this as a springboard to review number concepts about days in a week, in a month, in a year, and also in a season (like from September 21 to December 21. Don't forget the month of February during Leap year!)

Science: Rivers in the Desert?

Marian names the curving road, River Rhode, because it is like a curving river. Then the text says you have to ford the river to reach Roxaboxen Maybe there was a real river or stream in that place or perhaps a dry stream-bed that only has water during brief thunderstorms. However, it is also possible that River Rhode is by an imaginary river and they only pretend to cross or "ford" the river to get to their play town.

Either way, what does it mean to ford a river? To ford a river is to cross it by means of walking, driving, floating a raft, etc. Sometimes it isn't safe to ford a river by walking, driving or swimming because of the strong currents that rivers often have. Assure your student that it is *extremely important* to find out about any water that he might have to cross. He might ask people who know the river to tell him about any dangers, or explain that he can find information at a conservation headquarters.

How else can you cross a deep river? You can use a boat, a raft, or a ferry. (If you want to extend this list in humor, you could also swing over the river on a rope or vine, wear stilts, develop some type of hover-craft or an airboat like they use in the Everglades, etc.) If you must walk across unfamiliar water it is essential that you take along staff or walking stick to continually probe the water ahead of you to test for depth.

Science: Desert - Biome

Though many think the defining characteristic of a desert is a place of extreme heat, the first factor is actually the amount of rainfall. Deserts receive very little rain. There are some deserts in the world with no recorded rainfall. The necessary moisture for these areas to support any life of plant or animal comes from thick fog that occurs now and then. Other desert areas have short, sometimes violent periods of precipitation and then long stretches with no rainfall at all.

Find a simple children's book on deserts and read through and discuss the many facets of desert life: heat and cold, plants and animals that can live with little water and animal behavior in extreme climates, the places of deserts in the world, mirages, etc.

In the story of *Roxaboxen*, some of the elements of desert life you can talk about, search for, and identify are: large expanses of dirt (sand) and stones, ocotillo plants, various scrub brush type plants, prickly pear cactus and other cactus as well, and succulents, a lizard, and a hummingbird. (**Teacher's Note:** There is no need to cover every element of desert life because the subject of deserts will also be a part of the lessons for *The Gullywasher* by Joyce Rossi. When you get to that story it will be fun for your student to remember and review what he's learned about desert life while adding new, interesting information.)

Science: A Simple Machine or Not a Simple Machine?

Previously in *Five in a Row* Vol. 1, we've talked about simple machines. Simple machines help us do work more easily. Can your student remember some of the six simple machines and give an example of how they are used? They are: lever, wedge, wheel and axle, pulley, inclined plane, and screw (spiral inclined plane).

Does your student remember Big Jim in *Who Owns the Sun?* by Stacy Chbosky a FIAR story selection from Vol. 1? Big Jim uses a lever to pry up and move large rocks. Big Jim also uses an ax to cut down trees and the ax head is a wedge. We may not have talked about the wheel and axle which moved *Mr. Gumpy's Motor Car*, in the story of that name by John Burningham, a FIAR Vol. 2 selection, or about the fact that places which are wheelchair accessible often make use of the inclined plane in place of steps, like in *Gramma's Walk* by Anna Grossnickle Hines, a FIAR Vol. 2 selection, but you can mention these uses of simple machines now.

In, Roxaboxen by Alice McLerran, we see children running around holding wheels and pretending to be driving. The question is, are these wheels a simple machine? Ask your student if the wheel can actually do any work or is there some part missing. For wheels to be a simple machine they need an axle to actually get any work done.

(Teacher's Note: This lesson is just a chance to review simple machines and to help your student discriminate between what is and what is not a simple machine.)

Science: Seasons

As the story of *Roxaboxen* is a reminisce style of story, Alice McLerran chooses to tell the memory through the passing of the seasons. In this book we see the passing of the seasons of nature and also the different seasons of life from childhood to old age. Ask your student to name the seasons. Can he tell you what three months traditionally are included in each of the four seasons? If he doesn't know, just introduce this concept now.

Take a moment to discuss the seasons of nature. You could have your student fold an 8 1/2 by 11-inch piece of paper into half and then into half again to make four boxes. In each box have him write (and he may also want to illustrate) six natural elements of each of the four seasons. For instance in the spring box one student might put: first flowers blooming, warm days—cool nights, heavy precipitation, new leaves on trees, birds' first nesting, peas and new potatoes from the garden. A winter box might include: bare tree branches, cold days and nights, snow, many birds have migrated, gray clouds, brown grass. Obviously the things observed and noted by your student will reflect what the seasons are like where he lives since fall in southern California is not the same as fall in Vermont.

Another way to study this topic is to take a single season and study it more thoroughly than you have before. One of the ideas you might bring up is the terms of **Autumnal** and **Vernal Equinoxes** (the first day of fall and spring) and of the **Winter** and **Summer Solstices** (the first day of winter and summer) and their approximate dates.

If you have already done these types of lessons before and had a quick review, you may wish to introduce the idea that the seasons are reversed in the Southern Hemisphere. (The first day of the summer season is Dec. 21.)

Science: Precious Stones and Desert Glass

Remind your student of the part in *Roxaboxen* where Frances makes her home surrounded by desert glass and it is called a house of jewels. Your student may be interested in the fact that blowing, moving dirt and sand can wear away rough edges of glass and leave rounded pieces of colored glass which sometimes *look* like precious stones or jewels.

When people speak about precious stones (which are called gemstones when they are cut and polished) they usually mean those which are the most rare and therefore the most expensive, such as diamonds, emeralds, rubies, and sapphires. Semi-precious stones might include topaz, opal, amethyst, etc.

What the children find in the story *Roxaboxen* is desert glass, ordinary pieces of bottles, etc., and pieces of glass that have been smoothed and polished by the grit, and sand over long periods of time. They may have the colors of some semi-precious stones

but they are just glass. These bits and pieces of glass are not exceptionally valuable except to those with imagination!

Supplemental Story: *My Great Aunt Arizona*, by Gloria Houston. The connection to *Roxaboxen* is only the name of the state—Arizona.The character in this go-along story is given her name by her brother who is living in Arizona and thinks it a beautiful place. This girl, who is named for the state, never lives there. But with the connection of the name Arizona it makes this a great time to read *My Great Aunt Arizona* which is reminiscent of *Miss Rumphius* and *Island Boy* by Barbara Cooney. You might also enjoy finding a copy of *The Gullywasher* by Joyce Rossi and comparing the scenery.

Bible Lessons

Does your student remember in the story where it says that Roxaboxen had a town hall and a Mayor? There is also a reference to speeding rules and going to jail. Most towns have some sort of rules to live by called statutes or laws. These remind us that the Lord also has rules for his people such as the Ten Commandments and the Golden Rule. These rules, like the laws of a town, exist to help us live with others in a way that will assures safety and well being.

Exodus 20:1-17
Matthew 22:37-40

You can read through the Ten Commandments which are found in Exodus 20:1-17 and what is known as the Golden Rule found in Matthew 22:37-40. Talk about the ways that these rules help one stay safe and happy.

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Exodus 39:8-14
Revelation 21

The pieces of desert glass colored like amethyst, etc., can bring to mind the stones on the priestly garments of the Twelve Tribes. Exodus 39: 8-14 speaks of these stones, one for each of the Twelve Tribes of Israel. In Revelation 21 there is a description of the New Jerusalem with the foundation of precious stones in verses 18-21. Amazing!

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Genesis 21:14-21
Exodus 17:1-6

Roxaboxen takes place in the desert of Arizona. Does your student know that much of the Bible lands were also desert? Many of the stories such as the one of Hagar and Ishmael (Genesis 21:14-21), or Moses leading the people out of Egypt and needing to find water and thus striking the rock, speak of desert living. (Exodus 17:1-6)

Genesis 24:61
Genesis 31:17-18

Think of the stories of the Bible that have a camel in them. Camels are desert animals. They have the ability to go long distances without water, eyes that are protected from sand and sun's glare, etc. When Isaac's servant goes to find Rebecca, he rides on a camel. (Genesis 24:61) Jacob leaves Laban's for Cannan and puts his family on camels. (Genesis 31: 17-18). Your student may mention camels in connection with the story of the birth of Christ. Though there is no specific scriptural reference to them, the area from which the wisemen came would suggest their use of camels for travel.

You might explain the term nomad as a group of people living in the desert who have no definite home but go from place to place carrying their own tents and following the areas that have grazing grass for their herds and water for their ani-

mals and themselves. Certain peoples of the Bible lived as nomads. Even today there are peoples of the world in desert areas who live a nomadic lifestyle.

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Roxaboxen speaks of seasons, not only of the four seasons of the year but also of changing seasons of growing up and becoming older. The Bible has references to both of these kinds of change. (Genesis 1:14 about the sun and stars being for signs and for seasons, Genesis 8:22 while the earth lasts seedtime and harvest, summer and winter shall remain, and Matthew 24:32 about knowing that it is summer because the fig tree is putting forth its leaves.) The seasons of growing older can be seen in the stories of David, Samson, Simeon and Anna and Jesus, and obviously any of the people chronicled in the Bible over long periods of time. As in *Roxaboxen*, growing up and growing older are certainly a natural part of life.

Genesis 1:14
Genesis 1:22
Matthew 24:32

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In *Roxaboxen*, the narrator of the story tells about the road named River Rhode and the river they had to ford to get to Roxaboxen. Using this Bible tie-in, can your student think of the names of any rivers in the Bible? Some of the more famous ones might be the Jordan (Joshua 3:11-17 where the people crossed on dry land) and the Nile (Exodus 2:3 the story of Moses in the bull rushes). Then there is also the River of Life! (Revelation 22:1 crystal clear coming down from the throne of God).

Joshua 3:11-17
Exodus 2:3

Revelation 22:1

RECIPES FOR A DAY OF IMAGINATIVE PLAY

The Southwest has cactus that makes delicious salsas and salads. The chicken salad below is perfect for a lunch or dinner after a long day of playing pretend. The mini-muffins—in two flavors—will accompany the salad perfectly, as well as make little cakes for selling in pretend shops. And doesn't the sucker candy look very much like desert glass? It will gently soothe the parched desert throat.

Chef's Corner: The Southwest has a genus of cactus called Opuntia which include the various prickly pear cactus species. The prickly pear cactus has a fruit that is sold in stores called 'tuna'. The leaves (pads or paddles) of the prickly pear cactus (which are really branches or stems) are marketed in the stores as **Nopalito**. These nopalitos have spines that are difficult to remove so unless you are expert in spine removal, it is best to purchase the ready to use nopalitos in a jar. If you cannot find Nopalitos ready to use, substitute cucumber instead and pretend!

Orange Walnut Muffins

2 cups flour
3 teaspoons baking powder
1/3 cup chopped walnuts
1/2 cup orange juice
1/3 cup milk
1/2 stick (1/2 cup) butter, well-softened
1/4 teaspoon salt
1/2 cup sugar
2 eggs
1 Tablespoon orange peel

Preheat oven to 425 degrees. Mix the dry ingredients together. Beat the eggs and add the orange juice, peel, milk, and butter. Beat and blend together. Combine with the dry ingredients, stirring just until combined. Fill lined muffin cups until each is 2/3 full. Bake for 15 to 20 minutes, or until a toothpick entered in the center comes out clean. Makes: 24

Strawberry & Spice Muffins

2-1/4 cups flour
1 cup sugar
2 teaspoons baking powder
1/2 teaspoon salt
1/2 teaspoon cinnamon
1/4 teaspoon nutmeg
1 cup rich milk or half-and-half
1/2 cup vegetable oil
2 eggs

1 teaspoon vanilla
1-1/2 cup diced fresh strawberries

Stir together the dry ingredients and add the strawberries. Stir to coat the strawberries with the flour mixture. (This will keep the fruit from sinking to the bottom of each baked muffin!) Combine the wet ingredients and then add them into the dry ingredients. Stir as little as possible. Do not beat. Spoon into 12 greased muffin cups and sprinkle with sugar. Bake for approximately 25-30 minutes in a 350-degree F oven. Let sit about 5 minutes before removing from muffin tins.

Cactus Chicken Salad

4 cups boneless whole chicken breasts, cooked and chopped
3/4 cup cactus, rinsed well, patted dry and diced (found in jars in most supermarkets labeled as "Nopalitos")
3/4 cup golden raisins
1 teaspoon Dijon-style prepared mustard
3/4 cup mayonnaise
3/4 cup pineapple tidbits, drained
1 teaspoon curry powder
1/3 cup chopped celery
1/2 cup chopped pecans
1 cup seedless grapes
1 head iceburg lettuce- rinsed, dried and chopped

In a large bowl, combine the chicken, cactus, raisins, mustard, mayonnaise, pineapple, curry powder and celery. Mix ingredients and divide among four servings of lettuce. Top with pecans and garnish with grapes.

Desert Glass Candy

*This recipe is simple and very tasty, but it absolutely requires the help of an adult! Boiling sugar is extremely hot so please take proper precautions and work carefully!

1 cup water
3 1/2 cups white sugar
1 1/2 cups light corn syrup
1 tablespoon cinnamon extract
1 tablespoon red food coloring

Grease one 12x18 inch or larger baking sheet. In a large heavy saucepan, combine the water, sugar and corn syrup. Heat over high, stirring constantly with a heat resistant spoon, until all sugar is dissolved. Stop stirring and bring to a boil. Boil until a candy thermometer reads 310 degrees F (154 degrees C). Remove from heat.

When bubbling has ceased, stir in the flavoring and food coloring. Spread into the prepared pan so that the candy is no more than 1/4 inch thick. Cool for 45 minutes in the

refrigerator. Break into pieces and enjoy! (You can make this with different colors and different flavorings.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	The Raft
Author:	Jim LaMarche
Illustrator:	Jim LaMarche
Copyright:	2000
Summary:	A boy's disappointment turns into discovery one summer at the lake.

Social Studies: Geography and History

The setting of *The Raft* as listed in the dust jacket information is the Wisconsin woods. Let your student find the state of Wisconsin and place the story disk for *The Raft* there.

Wisconsin entered the Union in 1848 as the 30th state. The capitol is Madison, though Milwaukee is its largest city. The name Wisconsin and the names of countless cities, counties, roads, rivers, etc., of Wisconsin are Native American. As your student looks at a map of the United States, he can see that the entire eastern coast of Wisconsin borders one of the Great Lakes—Lake Michigan. The northwest corner of the state also touches another of the Great Lakes—Lake Superior. Has your student heard the names of all the Great Lakes? (Superior, Michigan, Huron, Erie and Ontario)

Wisconsin has long been known as the dairy state, though California is challenging in the quantity of milk production. Dairy is still Wisconsin's primary industry, with milk, cheese, ice cream, etc., a major portion of the state's agricultural output. Paper making is also a large industry in this state.

Circus World Museum is in Baraboo, Wisconsin. It was here that the Ringling Brothers began their celebrated circus which has since joined with Barnum and Bailey to make the Ringling Brothers Barnum and Bailey Circus, the most famous circus in the world.

(**Teacher's Note:** For explanation of Wisconsin's nickname—the Badger State, see the Science lesson below: Biology -Badger.)

Social Studies: Character Relationships

You don't have to discuss all these relationships at once. After reading the story on different days, you may bring them up one at a time along with other lessons for each day and ponder the concepts together. You can also do this at break times during the day and say, "Remember our story this week? How do you think Nicky felt about (such and such situation)?" Then, just talk about a single character relationship.

Disappointment: Ask your student when he first sees Nicky's disappointment in the illustrations of the story. (You can see Nicky's disappointment as he is driving toward his grandma's house at the beginning of the story and also as his father drives away.) Why is Nicky disappointed? (He wants to stay with his father during the summer. His Grandma, and the life on the river are new to him. When something is new, it often is not a very comfortable feeling. Discuss with your student that it certainly was not the way he had imagined his summer was going to be!) Ask your student if he has ever felt this kind of deep disappointment. Tell him about a time when you might have felt this way.

Frustration and Flexibility: When Nicky is asked to fish, and he doesn't know how and his first fishing trip is quite frustrating. He doesn't even catch any fish! He is not only frustrated, he is sort of angry. Can your student find the page that describes Nicky's frustration?

The interesting thing about frustration is that it can lead to anger, which can be destructive. Or frustration can lead to flexibility or creativity that is often productive. Talk with your student about scenarios that go each way. Think of some examples of each from your own life and share with your student the action and the results. Then tie the lesson into the story: For instance, Nicky could have let his frustration turn into real anger and thrown Grandma's pole into the river! That is an example of anger taking over and becoming destructive (destroying the pole and making his Grandma sad.) Or Nicky could just drop his frustration and go in for dinner. Or even better, Nicky could have let his frustration lead to being flexible and he could have tried fishing in some *other* places including where Grandma suggested he fish! What would be the results from these three scenarios? (The first would not be good for Nicky, the second would be better but not best and the third might actually have positive results! He might have caught some fish.) How does your student think he could put some of the lessons he's learned from Nicky into effect in his own life?

Teachability: Nicky is quite disappointed to be left with his Grandma at the lake for the entire summer. He could easily have become more and more grumpy and not cooperated with his Grandma. Instead, though he was sad, he allowed himself to become acquainted with his grandma and the river. Each day he becomes a bit happier and continues to learn from everything around him. At the end of the summer, he knows his Grandma much better, he has learned so much about the river and its wildlife that he didn't know before, and he has learned to draw and has been allowed to sleep out on the raft at night. Think how much Nicky would have missed if he had not been teachable!

Social Studies: The History of Television

Nicky complains about spending the summer at his grandma's, "She doesn't even have a TV." Nicky's grandma may not have wanted a TV, or perhaps way out in the woods, the reception would be so poor that it wouldn't be worth watching. Nevertheless, TV or television, is a piece of electronic equipment that is found in many homes and an object that *does* have a history!

Before you present this lesson, ask your student if he has any idea when the television was invented, when the first program was aired in the United States and how long it took for most families to have a television set in their homes.

In 1929 a scientist named Zworykin was credited with the basic invention of a machine that would *broadcast* a television type image as well as a machine that would *receive* such an image.

It was the year 1939, in the United States, that television first broadcast programs to the public. Most families did not have television sets. World War II slowed down interest in television (with rationing, and less discretionary spending money, and low production). Remember that many people around the world listened to news of WWII on their radios—not on television.

However, after the war was over televisions were found in more and more homes until most American families were viewing TV programs by the end of the 1960's.

The World Book Encyclopedia has an excellent section on television, with information on how a television broadcast and television receiver (TV set!) works, how programs are filmed and produced as well as other topics for those students who wish to explore this fascinating realm.

Social Studies: Character Relationships - Chores - What Can You Do?

Nicky helps his Grandma. One of the ways he helps is doing chores. What are some of the chores he does? (He cleans the gutters, stacks firewood, and cleans the spark plugs.) What kinds of chores does your student do? Does he think that he is good at his chores? Does he do them well? Are there other things he thinks he could do to help at home?

You can have your older student make an organizational chart for chores. Perhaps he could come up with some special names for the different categories of chores. Host or Hostess could be the description of the person who sets the table and makes sure everyone has drinks (and drinks refilled) and food. The one who cleans up the table and sweeps the floor might be called the Janitor or Dining Room Maintenance Supervisor! Perhaps the one designated to answer the phone and the door for the day might be called the Secretary or Administrative Assistant, or the child responsible for helping in the kitchen the Sous Chef (pron. "soo" chef) who is the head chef's helper or under-chef). It is good to learn to take even small chores seriously and try to do them well. There is even more fun and pride in thinking about chores in the role of adult jobs!

Language Arts: Opening Sentence

Does your student like the opening sentence of *The Raft*? Does it make him want to read more of the story? No assignment here—just the appreciation of a truly excellent story opener! If your student is keeping a (blank) book that he fills with his favorite quotes, he might enjoy copying a favorite opening story sentence from time to time, also. Of course, he won't plagiarize and use these exact sentences in his own stories, but a really great sentence is fun to look back on and remember! And, it may give him the inspiration for a great opening sentence of his own.

Language Arts: Just for Fun!

Can your reading student find the month of the year hidden within the last name of *The Raft*'s author, LaMarche? (March)

Can your student find the names of two games that children play which LaMarche uses to describe the playful otters in this story? (Keep Away, Tug of War) Does your student know how to play Keep Away and Tug of War? Keep Away is the game where there are two people on each side with the "it" person in between them. (Or there can be more than one on each side, with several in the middle.) The object of the game is to toss a ball from one side to the other, high enough that the ball is kept away from the middle player(s). The middle player watches carefully and jumps at just the right time to try to catch the ball. When the center player(s) successfully catches the ball, someone else is then "it". This can be a truly frustrating game for players who are not equally matched, either in height or athletic ability, but great fun for children who have a somewhat equal chance to catch the ball.

Tug of War is another childhood game that has been popular for generations—in fact, for centuries. In Tug of War there is a centerline over which each team of players tries to pull the other team. The game is played with a long rope. The members of each team hold the rope tightly and at a signal the two teams begin to tug in opposite directions. If the sides are somewhat equally matched, the game usually lasts for a time while each side gains some territory and then loses it again. Finally one side pulls the opposing team over the center marked line. The team that crosses the line loses.

Language Arts: Where Do Stories Come From?

In the Note from the Author, on the page before the first page of the story, Jim LaMarche gives a great deal of insight into how his memories find shape in the pages of *The Raft*. It is a special addition to a book when the author is able to share in such detail how he came to write his story. The author does not mention anything about the games he played as a child, but do you think Mr. LaMarche perhaps played Keep Away and Tug of War as a boy? Do you think that maybe otters' behavior reminded him of his boyhood games?

If you have any stories at hand, written by your student, you might look through them with him and let him tell you what influenced certain details of his stories, just as Jim LaMarche shared with his readers.

Language Arts: Character Names

Grandma is called "River Rat" by Nicky and by Nicky's father. What does that nickname imply? What is an actual river rat and how does it act?

A river rat could be the muskrat of North America and Europe. Muskrats live in burrows on the bank of streams and rivers and spend lots of time in the water. Muskrats also build houses of reeds and other plants that look much like the homes of a beaver, complete with underwater entrances. (See more on muskrats in the Science lesson below.)

What famous book has a character that is a River Rat? *Wind in the Willows* has a famous character named Water Rat or Ratty. Have a copy of *The Wind in the Willows* on hand as you do this lesson, and take a few minutes to read the first chapter out loud. Let your student revel in the descriptions of the river, and it's occupants. There is even an otter! Maybe together with your student you can find other similarities between Kenneth Grahame's description of the river in *The Wind in the Willows*, and that of Jim LaMarche's descriptions and illustrations in *The Raft*.

Now, think about Nicky's Grandma. Does your student think that her nickname was a fitting one? Why? (Maybe because she lives on the bank of the river, and loves the river, and enjoys floating on it and in it! Very much like the muskrat or water rat.)

Also, Grandma looks quite comfy sitting on the raft. Whose raft do you think it might have been? Does she seem surprised when Nicky found it? (No, she shows up with a life jacket and a pole!)

Language Arts: Creative Imagining and Writing

We are not told in *The Raft*, but does your student think that Nicky ever spent any more summers at Grandma's? Perhaps your student would like to write a story of Nicky's second summer trip to the river, or a story of him returning to Grandma's when he was older—maybe even much older, with a son of his own. Help him think through some of the details. If he selects the scenario of Nicky returning with a son of his own, would Grandma still be there? (Maybe, or maybe not) If she is, how old might she be? If she was still at the cabin and she would be quite old. Does your student think her "bear" carving would finally be finished?

Language Arts: Vocabulary

snorkle	underwater breathing apparatus, cannot be completely submerged since the air-flow originates at the top of the tube
bobber	a hollow plastic or wood device that attaches to a fishing line to allow the fisherman to better detect when a fish bites at the bait.
hover(ing)	the state of hanging suspended in the air as the birds were around Nicky on the river

dock	a structure that makes it possible for boats to tie up while they are still in the water. Docks can be made of wood, metal, styrofoam, etc., and are made stable by attached pilings sunk into the mud or by floatation devices like pontoons.
cave paintings	paintings found on the walls of caves, done by people who lived long ago
hitchhiker(s)	those who ask for free rides from passing transportation
preen(ed)	in this story lesson: what a bird does when it draws its beak through its feathers. This sometimes spreads oil that acts as a water repellant through the feathers and also helps straighten the bracts of the feathers themselves for smoother flight.

Art: Learning to Draw

Nicky spends the summer seeing wonderful sights and learning to draw what he sees around him in the woods and on the river.

An excellent resource for learning to draw with perspective is *Drawing Textbook* by Bruce McIntyre. It is usually sold for less than ten dollars through homeschool catalog services. Or look for *Draw Squad* by Mark Kistler which includes much of *Drawing Textbook* in it along with additional helps.

Other wonderful resources for learning to draw nature include: *Pocketful of Pinecones* by Karen Andreola which is a story, yet a most inspirational work to encourage a teacher to open up the world of nature to children and lead them to draw and write about what they see. A *very* special book.

Jim Arnosky books: *Sketching the Outdoors in Summer* is a good series of books—with one book for each season.)

Cathy Johnson: *Sierra Club Guide to Sketching Nature*

The previous three book recommendations are adult books but they are filled with ideas and pictures and instruction for sketching in the wild.

Art: Seeing in Art

Jim LaMarche wrote a "Note from the Author" piece for this story. In it, he says that when you draw something from nature you learn about it. Why does your student think Jim LaMarche would say that? What is it about drawing that would help someone learn about his subject? To draw, an artist has to really see exactly what is there. Really seeing the subject of their drawing takes time and patience. Many people look at a tree and then quickly draw what they imagine a tree looks like while an artist sits down, looks at the tree and finally begins to draw the trunk as that *particular* trunk looks, then

the branches as they actually attach to that specific trunk, etc. The same is true of drawing animals, people, anything! Most artists draw from what they actually see and observe and sometimes they use extra photographs as well. Has your student ever observed in his own work that drawing from a real life subject is helpful?

Art: Palette and Medium

Warm colors—what are they and why do we call them warm? The warm colors are yellow (slightly to the red side), orange, and red (slightly to the orange side). We call these colors warm because they remind us of the sun and fire and things that are warm!

Why would Jim LaMarche choose the colors off the warm palette for *The Raft*? Ask your student what season it is when Nicky is staying with his Grandma. (Warm summer) In fact, it is so hot during Nicky's summer at Gramma's that on some nights Nicky sleeps outside on his raft. Therefore, a warm palette is just right for the season of this story.

Looking at the illustrations, what medium does your student think is used by Jim LaMarche in *The Raft*? Your student may think that some pages and illustrations look like colored pencil while others look like watercolor. It is possible that LaMarche used a soft mixed-media (like watercolors and pastel chalk) *both* in his illustrations. Your student can try drawing and painting with mixed-media as well.

Art: Contrasting Views That Illustrate the Text

With your student, enjoy the double page color illustration found on the title page (remember that the title page usually has the title, author and publisher listed.) This page shows Grandma's house from an aerial view. From this view you can tell how remote the house is. There are no close neighbors, only forest. And you can see the dock and the river as it flows past Grandma's place.

Contrast* this scene to the one opposite the text of the first page of the story. This is the illustration with Nicky riding in the car. What does your student see through the windows of Nicky's car? (The picture shows a large city with tall, densely-spaced buildings.) This is what Nicky is used to, and now looking back at the aerial view of Grandma's house, can your student see why Nicky might feel "out of his element?" No neighbors, no friends, no TV or video games, only woods.

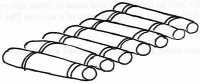
[*Remind your student that when you ask for two or more items to be compared or contrasted you believe the two items are not just alike. **Compare** means to find the ways things are *alike*, and **contrast** means to find the ways things are different. The aerial view and the city view stand in great contrast to one another!]

Talk with your student about how these pictures are a good example of illustrations that are in keeping with the message of the story and even give a greater sense of depth to the concepts themselves. What is stated in the words, is portrayed in these illustrations with graphic reality!

Art: Building a Raft

With your student, look at the illustration of Nicky wearing a diving mask leaning over the side of his raft playing with the otters. From this underside view your student can see that Nicky's raft is made with logs that have been lashed together and then boards nailed across the logs to form a solid, flat top.

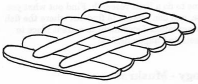
Using dowels cut to size (any size you deem proportional, the larger diameter the dowel, the longer the raft) and thin twine to lash the "logs" together, let your student fashion a toy raft of his own.



Learning to lash correctly, is not difficult, and its fun! Consult a Boy Scout or Girl Scout manual or find directions or other camping-type books from your library.

Then, if your student would like to have a flat top on his raft, he can glue wide wooden tongue-depressor type sticks over the top of the lashed dowels. Then he will be able to draw animals on his raft just like Nicky did.

Another type of raft you could make that would work without dowels would be to make a raft of Popsicle sticks or tongue depressors. It will make a better end product if your student uses doubled or even tripled sticks. Glue one stick directly on top of another. Do this process with another pair of sticks and continue until there is a pile of "doubled" (or tripled) sticks. Using these glued sets of sticks lay them side to side close together like Nicky's raft. Glue the sets together with the flat part on top. Then across the bottom of the raft glue two sticks cross-wise to make the raft sturdy. Now your student can decorate the top of the raft with drawings of animals.



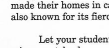
If you have a place to use a raft, you might enjoy a family project of making a real raft like Nicky used. Then learn to pole it on *your* pond, lake or river. Remember the life-jackets!

Science: Zoology - Badger

The Raft is a story that takes place along the river, near the woods in the state of Wisconsin. Wisconsin is known as the Badger State. Does your student know the animal called a badger? If he could see the badger's front paws he would probably be able to guess immediately that the badger was a digging animal. Long paws and longer curved claws are clues that this animal digs a deep burrow to make his home. He also uses his claws to dig out of their burrows small animals for his food. The state of Wisconsin was nicknamed the Badger State when miners dug for lead in the 1800's and some of these miners even made their homes in caves they had dug out for the purpose of a shelter. The badger is also known for its fierceness when cornered.

Let your student record facts about the badger and make a good drawing for his science notebook.

Science: The Science of Fishing



Fishing involves knowing what species are in one's area and where these fish are likely to hide. (Among weeds or stumps, or in deep holes, or just below the surface) It is also important to know what different fish eat (live bait) or what they will strike (artificial baits and lures). You can have fun exploring the history of fishing and how the Indians fished using nets, spears, etc.

In *The Raft*, Nicky does not know very much about fishing. His Grandma tells him what he should fish for (fat Bluegill) and shows him what to use for bait (red worms), and she also tells him where to fish (near the lily pads.) Nicky knows *what kind* of fish he is after, and he has the *right bait*, but does he listen to his Grandma when she tells him *where* to fish? (No. Ask you student if he can imagine why this might be so?) He looks around and decides he'll try a better *looking* spot, and he doesn't catch anything!

It is good to know what you are fishing for, and what the fish like best to eat, but it is also very important if you want to catch fish, to fish in their favorite places—the places they are most often found. Apparently Grandma's bluegills like to hide in the lily pads. Next time you want to go fishing, take the time to do a little research. Find out what you are likely to catch, what is the best bait to use, and don't forget to find out where the fish that you are after live and hide! Your local conservation department is a great place to begin your research. Don't forget your lifejackets and happy fishing!

Science: Zoology - Muskrat

When your student learns that Nicky's Grandma's nickname is "river rat", he may want to know more about a type of river rat—a muskrat that lives in North America (and in the Wisconsin rivers.)

The muskrat builds a home that looks much like a the home of a beaver, but it is smaller with underwater entrances and made from rushes and other plant material. It is also known to burrow into the riverbank to make a snug riverbank home.

If your student could look at a muskrat for himself, he would see webbed toes on the hind feet and be able to tell without any books or information that this animal spends time in the water. That is what webbed feet are for! The muskrat eats grains, insects, plants and is also a scavenger (will eat dead carcasses of animals).

There are good simple books at your library with additional information about the muskrat. Have your student draw the muskrat and write at least five interesting facts he's found in his research to put in his science notebook.

Science: Ways of Seeing Underwater

Your student can make a **below the water surface viewing device** by covering a large fruit can with saran wrap, and using a rubber band or duct tape very tightly over the wrap to keep it in place—the can is then put a few inches into the water. Your student can place his eyes into the open end of the can seeing through the lower end of the can with the saran wrap to the critters below. Leaning from a dock, or actually swimming in order to use this device necessitates a life jacket for safety!

Goggles and snorkel—A snorkel is a piece of equipment, which allows a swimmer to breathe surface air while having his face submerged in the water. The goggles allow him to see without water in his eyes.

Scuba diving equipment—Diving equipment uses cylinders of compressed air that allow a diver to breathe while his body is completely underwater. There is a certain amount of compressed air in the scuba tanks and this amount determines how long a diver may stay underwater. While the letters s,c,u,b and a have become a common word meaning diving equipment, scuba is actually an acronym for the words:

S elf
C ontained
U derwater
B reathing
A pparatus

Glass bottomed boats! Has your student ever heard of glass bottomed boats? These boats are built with large glass viewing areas where one can see coral reefs, fish, plants etc., all from the safety of a boat.

Science: Botany - Conifers and Deciduous Trees

On the third page of *The Raft* the reader can see Nicky standing behind a tree. The tree has white rough bark. Does your student know what kind of tree this is? (It is a birch tree.) The text on page two says that Nicky's father's car drives off into the pines. Can you see the pine behind Nicky on the third page? The pines of Grandma's woods are good examples of **Conifers**. These are the kinds of trees with needle-like leaves and seeds that are found inside pinecones rather than inside a fruit or nut. The conifers generally do not loose all their needles at once during winter weather. (Conifers do shed a portion of their needles at certain times.)

The birch tree in the story is a good example of a **Deciduous** tree. A deciduous tree has covered seeds (as fruit or nut) and will loose its leaves in the fall (or at least its leaves will die though some tree species don't lose their leaves till spring.) There are other aspects of Conifers and Deciduous trees that you can discover with a good, simple book or two from the library, if you desire to seek out more information.

Take a walk with your student and note which trees in your area are conifers and which are deciduous. If you have a cold winter season, have your student look for the deciduous trees that have dead leaves still clinging to the branches until spring. Have him discover what specific types of trees have this characteristic.

Science: North Woods and Lake Wildlife

Make a list of all the animals (and insects if you like) which Nicky saw during his summer vacation. Don't forget to look at your book from front cover to back cover while making your list! Then your student can use his list to fill in categories of Animal Classification.

(**Teacher's Note:** If you have done preliminary work on classification in *Before Five in a Row* games, and later in *Five in a Row*, Volumes 1-3, it might be time to introduce some of the more scientific names to the categories. For instance, under the category "Bird" write "Aves" in parenthesis on your chart. Before long your student will begin to recognize these new words that correlate them with the ones he already knows. This is not material to memorize at this age, but only for his interest and enjoyment.)

Animals with spinal chords or notochords (Phylum -Chordata) and Vertebrae (Sub-Phylum Vertebrata) are broken into the following Classes:

Mammals	Birds	Reptiles	Amphibians	Fish (now 3 categories)
(**Mammalia**)	(**Aves**)	(**Reptilia**)	(**Amphibia**)	let's still call this category Fish! or Fish with scales and bones are **Ostelchthyes**)
Bear	Blue Heron	Turtle	(none shown)	Bluegill
Raccoon	Swallow			minnows
Deer	Chickadee			
Raccoon	Ducks			
Fox	Swan			
Otter	Kingfisher			
Mouse	Cardinal			
Rabbit	Nuthatch			

(**Teacher's Note:** This is just a partial list of the animals and insects covered in the text and illustrations of *The Raft*. There doesn't seem to be an amphibian in the pictures, but maybe your student will find one. If not, then keep this list and add to it later when studying the lessons for the story *Higgins Bend Song and Dance*. There is a frog in that one!)

Ok, now what can your student do with his list that includes crayfish, clams, dragonflies, and butterflies? These do not fit in any of the five classes of Sub-Phylum Vertebrata or Phylum Chordata. That is because these creatures have no notochord or backbone, but rather are members of the Phylum **Arthropoda** (creatures having head, thorax and abdomen and three pairs of jointed legs) classified as **Class Crustacea** for the crayfish, **Class Mollusca** for the clam, and **Class Insecta** for the dragonfly and butterfly. (Each of these classes have many members, these are just an example.)

[**Teacher's Note:** The story of *The Raft* has information that goes along wonderfully with the lessons of *Higgin's Bend Song and Dance*. You don't need do these stories following one another. Leave some time for your student to digest and ponder the information he has learned. However remember when you finally come to the companion story, that you will be reviewing information and adding new information to similar lessons and be sure to tie your lessons to the first story!]

Bible Lessons

Romans 8:28

Romans 8:28 says that all things work together for good. If Nicky had this verse committed to memory, he might have used it to gain strength as he watched his father's car pull away from Grandma's and felt the disappointment of separation, and the eeriness of a summer spent in unfamiliar territory.

How might this verse have helped Nicky? Can your student think of times when this verse could be of help to him?

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John 21:2-8

Did you know that the part of the story where Grandma tells Nicky where to fish reminds us of a story in the New Testament! In the book of John 21: 2-8, your student can read this story: The disciples had been out all night fishing and had come back in the morning with empty boats. They meet Jesus on the shore and he tells them to go back out and cast their nets on the other side of the boat. Now, the disciples could have done what Nicky did. They could have looked around and decided they knew better than Jesus where to cast. But they didn't. The disciples (even though they were not sure it would work) cast their nets where Jesus indicated and they pulled in so many fish their boats were almost sinking! Does your student think that Nicky probably would have caught some fish if he had been teachable and fished for the bluegill where Grandma said? (At least he would have had a better chance.)

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Genesis 6:14-22

You could tie in the chapters about Noah to *The Raft* by discussing the raft and all the animals that Nicky sees that summer. Nicky's raft is a type of boat and has the animals drawn all over it and some even sitting on it, reminding us of a boat long ago that housed and saved all the animals of the earth! Genesis 6:14-22

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Hebrews 13:5c

If Nicky felt at first like he had been sort of left behind by his father, he might have remembered his Heavenly Father who it says in Hebrews 13:5c, I will never leave you or forsake you. That is God's Word and Nicky would have been able to count on that no matter how he felt.

RECIPES FROM A GREAT SUMMER IN THE WISCONSIN WOODS

Summers is a perfect time for a cornbread treat. Cornbread is always a wonderful go along for dinner if you catch the fish, but will work for a summer breakfast treat just as well if you don't. The raft cookies will bring back good memories of reading fun.

Honey Cinnamon Cornbread

(To go along with fresh fried fish, if you caught some!)

2- 8 1/2 -ounce packages Jiffy Corn Muffin Mix
2 eggs
2/3 cup milk
1/2 cup honey
1/2 teaspoon cinnamon

Prepare muffin mix according to package directions with milk and eggs. Add honey, and cinnamon, stir well. Pour into a 9-by-13-inch greased pan and bake 25-35 minutes at 300 degrees. Serve with sweet butter and a tall glass of ice cold milk.

Famous Burgers

(If you didn't catch any fish today!)

2 pound ground beef chuck
1 small yellow onion, finely diced
8 tablespoons brown sugar
1 teaspoon garlic powder, divided
4 tablespoons steak sauce or barbecue sauce (i.e., A1, Kansas City Masterpiece, etc.)
1/4 cup Italian seasoned bread crumbs

Preheat an outdoor grill for medium to high heat, and lightly oil grate.
In a medium bowl, mix ground chuck, onion, brown sugar, garlic powder, steak sauce, and Italian seasoned breadcrumbs. Form the mixture into six burger patties. On the prepared grill, cook the burgers 3 to 5 minutes on each side, or to desired doneness. Serve on grilled or toasted buns with all the toppings: lettuce, tomato, cheese, onions, pickles, ketchup and mustard.

Raft Cookies

1 stick softened butter
1 lb. powdered sugar

1 tsp. vanilla
1/4 c. water
Tan food coloring (available in paste form from Wilton or other cake decorating supply stores, or you can experiment with liquid food coloring to get a shade of tan you like.)
12 graham crackers (you can use them whole or take off one of the four sections for a raft shape)
Small tubes of decorating gel/icing (in several colors of your choice)

Begin by making the basic buttercream frosting. Blend the softened butter, powdered sugar, vanilla and water until smooth; if necessary, add more water by teaspoons full until it reaches your desired consistency. Then, taking just a tiny amount at first, swirl in the tan food coloring – adding more if necessary to make it look like the color of a raft!

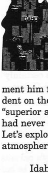
Now, spread the tan icing on each graham cracker. You can make the frosting smooth by running a hot knife over it. Next, using a toothpick as a tool (a knife), draw across the graham cracker, making marks for the "sections" of the "raft" in the icing. Finally, your student can take the different tiny tubes of decorating gel/icing and draw animals on his "raft" cookie!

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	Mailing May
Author:	Michael O. Tunnell
Illustrator:	Ted Rand
Copyright:	1997
Summary:	Desperate times and loving creativity team up for an amazing story of travel!

***(Teacher's Note:** There is a short discussion lesson called "Cover and Story" in the Art lessons for this book. If you want to do the lesson, you need to do it before you read the story. If your student has already read *Mailing May*, just skip this Art Lesson.)

Social Studies: Geography



Mailing May allows your student to make discoveries about the state of Idaho. If you have already studied Idaho, use this opportunity for a review and add a few new facts for your student. If you are just beginning to study this state you may want to start by asking, "In our story today, May traveled to Grandma Mary's across the state of Idaho. Do you know anything special about this state? Can you find it on a map?" Or try going to the map and saying, "Idaho, let me see—where is it?" As you are looking over the map your excited older student might surprise you and say, "it's on this side!"—or even point to it. In these ways you are modeling respect for your student by gently asking about new topics and discovering what he already knows. Be sure to compliment him for information if appropriate. But, remember to be careful not to put your student on the spot, so to speak, and when you share information try to do it without a "superior attitude." You could say something like, "You know there was a time when I had never even heard of Idaho. Even now there is so much about that state I don't know. Let's explore it together!" One of your goals, as teacher, is to create a safe, comfortable atmosphere in which your student can wonder and learn.

Idaho was the 43rd state to join the Union in the United States of America in 1890. The capital of Idaho is Boise. Lewis and Clark passed through Idaho on their way to the Pacific in 1805 and made their camp near what is now the town of Lewiston. Lewiston is the same town where May visits her Grandma! Also included in the text of this story are the names Grangeville and Lapwai Canyon. Grangeville is a town southeast of Lewiston. The Lapwai Canyon is a part of the Nez Perce Indian Reservation. You

can easily see Lewiston, Grangeville and Lapwai Reservation on the political map of Idaho in *The World Book Encyclopedia*. Enjoy your study of Idaho and don't forget to place your story disk on Idaho or, if your map is large enough, on Grangeville or Lewiston!

One thing your student may be able to associate with this state is the potato. That is because in addition to wheat and sugar beet production, Idaho grows more potatoes that any other state. People throughout the United States love hot baked potatoes that have been grown in Idaho!

Idaho also has incredible natural resources of forests (much of which is milled and made into paper) and minerals (silver, copper, gold, zinc and lead). Have your student watch the highways for semi-trucks carrying paper from Idaho to other states across the country. You will be able to tell the shipment is from Idaho by the logos on these trucks. In addition, Idaho is included in the Rocky Mountain States, has scenic vistas from magnificent waterfalls and beautiful rivers, to majestic mountains and breath-taking valleys.

Social Studies: Relationships - Being Willing to Be Part of the Solution

May is deeply disappointed when her parents tell her she has to wait to visit her grandma. May's willingness to seek a job to pay for her train ticket is highly commendable. May is ready to cheerfully get a job herself, and save for the ticket!

Discuss disagreeable people who always seem to want everything done for them. Some of these people would never consider trying to help themselves. Some would never think about trying to be part of the solution to their own problem. The next time such a situation presents itself, encourage your student to remember May and her heart of integrity. Maybe your student will think about ways he can help be a part of the solutions to his own problems!

Remember *Down, Down the Mountain*, *Five in a Row* selection in Volume 2 and *Andy and the Circus*, *Five in a Row* selection in Volume 3? In each of these stories the children have to be cheerful, hardworking and resourceful to solve their problems. In *Mailing May*, May tries unsuccessfully to help with the ticket, but her heart is certainly willing just like the characters in *Down, Down the Mountain* and *Andy and the Circus*.

Social Studies: Problem Solving

The story of *Mailing May* offers an opportunity to talk about problem solving. May's parents have a problem. May wants to visit her Grandma Mary and May's parents don't want to disappoint her. Life presents many problems and situations that can be baffling and seemingly without solutions. Learning to think beyond the obvious, creatively and resourcefully is an important life skill. Can you think of a time you solved a hard problem in a creative way? If you can, think of some difficult problems you have faced and let your student try to think of creative ways those problems could have been solved. A good way to encourage your student to think creatively is to play brainteaser games,

and to read books of riddles and mysteries. Trying to solve the riddles and mysteries and brainteasers helps expand your student's solution thinking. The next time your student has a problem to solve, remind him of *Mailing May* and work together to find a creative solution.

Social Studies: History - The American Flag of 1914

If the flags shown in the illustrations of the post office were current how many stars would be on each one?

You can decide if you want to present this information, or have your student research and find it out for himself. (The flag in May's post office, if current to the time-frame of the story (1917), would have had forty-eight stars. New Mexico and Arizona had entered the Union in 1912 as the forty-seventh and forty-eighth states. It would be 1959 before the additions of Alaska and Hawaii would make the fifty states currently in the Union.)

Social Studies: History - Daniel Boone

Why did May say she "felt as adventuresome as Daniel Boone?" If your student has never heard of Daniel Boone, take a moment to introduce him to this famous American frontiersman. Continue by adding facts and reading more stories about Boone if your student is already familiar with him.

Daniel Boone was born in Pennsylvania (to a Quaker family) in 1734. He is still famous for his woodsman's skills, his calm, quick thinking and his marksmanship. He explored the unsettled land now known as Kentucky and helped develop the Wilderness Road. This road made it possible for settlers to get through the mountains to the new fertile lands of Kentucky. Boone also explored in North Carolina and Missouri, etc. There is a famous poem by Arthur Guiterman called "Daniel Boone." You can find it in *Favorite Poems Old and New*, ed. by Helen Ferris. This poem is probably too long and difficult for your young student but the first stanza can be enjoyed and it ends with the well-known line "Elbow room! laughed Daniel Boone." Boone was a man always wanting to be out in the wilderness with lots of room, never too close to towns full of people! He died in 1820. Boone is often considered America's most famous frontiersman and simple books about him can be found at any library.

After learning some facts about Daniel Boone and his incredible life of adventure, your student can understand how extremely adventuresome May must have been feeling!

Social Studies: Trains

In *Mailing May,* illustrations show a steam train, a trestle bridge, a mail car and a depot. Point out these illustrations and identify the terms for your student. If he demonstrates a love for the subject of trains you have a nearly limitless topic to explore. There are simple books on trains past and present. Finding out about modern trains allows you the fun of visiting a switching yard or examining trains as they pass by in your own area.

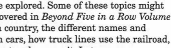
The train in *Mailing May* was a steam train and you can build a train like this using chairs and a large box for the engine with a cut out windshield and painted gauges, etc. Then act out the steps necessary to operate such a steam engine. You and your student could demonstrate shoveling coal or chopping wood and stocking the tender, stopping and filling up with water at the water tower, stopping for cows on the tracks, and seeing Indian and buffalo, etc. You could also act out stopping for mail, passengers and various shipments of cargo, traveling over giant trestle bridges in the mountains, and stopping to clear the snow from mountain passes so you can get through.

Don't miss the opportunity to sing together such songs as, "I've Been Working On the Railroad," "The Wabash Cannon Ball," or "John Henry."

Your younger student will have fun making train cars (past or present) from shoeboxes and oatmeal or salt boxes, while your older student may want to investigate setting up an actual model railroad! (He can choose to model a steam railroad with mail cars, etc., as in this story or he can build a modern railroad with diesels and container cars.)

There are many other areas of rail lore to be explored. Some of these topics might be: the setting of the Golden Spike, which is also covered in *Beyond Five in a Row Volume 1*, the actual number of miles of railroad track in a country, the different names and routes of famous trains, the different kinds of train cars, how truck lines use the railroad, etc. In all of these topics, find a small area of interest and pursue it. Later, you can come back to the subject and present more information.

(**Teacher's Note:** It is interesting to note that the dividing of the United States into **time zones**: Eastern, Central, Rocky Mountain and Pacific was instituted because the railroads wanted a more accurate and universal method to keep time so the trains could run on schedule!)



Social Studies: Department Stores

May goes to a department store to ask for a job. Gaze at the vast array of items in the department store illustration. There is food, and shelves of dishes and glassware. Customers can buy a money order there. And though we can't see from the picture, the store probably carries a line of clothes, gardening items, and possibly furniture. Discuss with your student what a **department** store is and name a few in your area. Don't forget the X-mart stores! One of the goals of *Five in a Row* is to introduce what life was like at a certain time in history and then help your student correlate it to today's culture.

This story takes place early in the twentieth century, around 1913. (You can even tell this from the illustrations where you see horse drawn carriages as well as cars in the picture of the depot at Lewiston!) Prior to this time, in the late 1800s, a department store might have been called a **general store** or a **mercantile** (meaning trading wares). May does not get a job at the department store. What does your student think were some of the reasons she was turned down? If your student was the manager of the store does he think he could find something for May to do?

Rachel Field wrote a poem called "The General Store". You might enjoy finding it and reading it together along with this lesson. It begins, "Someday, I'm going to have a store, with a tinkling bell hung over the door. And real glass cases and counters wide, and drawers all spill-y with things inside…" The poem goes on to enumerate the goods found in a general store of country America.

Social Studies: Details of Life in the Early 1900s

Even in the picture of the Lewiston station the reader can see the changes beginning in the early 1900s. Though there are still horses to ride and to pull carriages and wagons, though in the illustrations the reader can also see a car. In the town of Lewiston, cars were beginning to be introduced and electricity was beginning to be used in homes. With your student look at the illustrations in the story and find these items: oil lamps (electricity and electric lights came to cities before the rural farms—are there electric lights in the post office?), high button shoes, formal style portraits, pot bellied stoves, and women's long dresses.

Social Studies: Stamps and Stamp Collecting

A stamp illustrates the title on the cover of *Mailing May*. There are also stamps under the text on the page where May is being weighed. Stamps are amazingly full of color, have fascinating pictures, exciting history, and more! Show your very young student the stamp on the front cover of the book. Then show him some stamps you have purchased at the post office. Let him look for illustrations of other stamps in the story. Explain how stamps are purchased and used.

For your older student, stamp collecting (or philately—fe lat e LE) might be an enjoyable and educational topic to investigate. Simple books on this subject will help broaden knowledge and interests and give instruction on how to collect and preserve stamps. You might even know a relative or neighbor who has a fine stamp collection. They might enjoy sharing how they began and what they have learned through this interesting hobby.

(**Teacher's Note**: For a quick stamp related art project, have your student trace several times the perforated outline of the stamp on the front cover of *Mailing May*. Then let him think of something he would like to honor, or an issue he would like to bring attention to, or an historic event to showcase and have him design some stamps of his own.

Social Studies: Post Office and the Postal Service

May was mailed to her Grandma Mary from the Grangeville, Idaho, post office. There are many postal related topics spoken of and illustrated in *Mailing May*. The post office of the early 1900s had some things that are different from today and many things that are still the same. If you like, look through your book and make a list of the things you see in the illustrations of the post office. Some of these things might be: horse drawn delivery, wanted posters, postal workers, stamps, mail cart (May was riding on one by the steam engine), mail scales, American flag, etc. Make two rows of boxes for yes

and no down the column of your list of postal items. Then visit a post office and let you student see how many of the same things he can find. He can mark no in the box if your post office doesn't have the item and yes if it does. Read the list for your non-reading student and let him mark the appropriate boxes. Feel free to add things to the list that your modern post office has.

Today mail is transported by air—airmail, and some first class mail. Mail is also carried by truck and rail. With your student talk about what happens to a letter or package after it is mailed. Find out if you can have a tour of your post office and have them explain the process.

(**Teacher's Note:** You could briefly mention the Pony Express that operated only about a year but was an exciting postal venture in U. S. history! There is more about this subject in the lessons for *Cowboy Charlie* in Five in a Row Volume 4.)

There are so many facets of the postal system. For instance, how many different classes of mail are there and why? (First class mail is usually correspondence, payments, etc., and the price for first class mail is more than third class. This is because first class mail gets priority treatment and goes on the first plane available, etc. Third class mail consists of bulk mailings, advertisements, etc. It does not cost as much to mail these pieces partly because it does not receive priority and also because the sender presorts them according to zip codes into bundles, saving some work for the post office. Often specified amounts of pieces have to be mailed at the same time to receive discounts, such as 300 pieces, 500 pieces, etc.

What does the post office do with dead mail—undeliverable mail? A post office generally routes undeliverable mail that has been sent first class to the dead letter office, where it is opened to find out if there are any clues to direct the piece. Third class mail is usually destroyed if marked undeliverable and there is no forwarding address.

Parcel (package) post began in 1913 at the same time as insured mail and **COD's**. What is a COD? (It is a parcel that is sent requiring the person receiving the package to pay for the item upon receipt. The mail service charges the seller for handling the transaction and then sends the payment to the person (seller) who sent the parcel. The letters stand for **Cash On Delivery**.) When did postal zones and zip codes come about? (Though two number postal zone codes were used prior to 1963, it was in that year that the Zip Code or five digit code was created and assigned to every address throughout the country. These digits represent an increasingly smaller geographical location, finally pinpointing an address to a specific post office [or postal zone for a larger city]. These numbers were an attempt to help automate the sorting of mail.) Large post offices offer patrons the ability to obtain a passport. No student can take in all this information at once. But keep in mind the small bits of knowledge and add them now and then as you read the story over again throughout the next year. And, just for your information, the formation of the **Interstate Highway System** in the United States was actually created to make an easy way to get mail service efficiently across the country!)

(**Teacher's Note:** Here is an interesting link regarding the topic of the U.S. Postal System. There is enough information here for well into the high school years so it is best used for your own information. And, there are sure to be some wonderful small bits you can share, with your young student. http://www.usps.com/history/history/his1.htm)

Language Arts: Literary Device - Alliteration and Hyperbole

Does your student remember the literary device called alliteration? Alliteration is a succession of similar sounds (not necessarily letters) which can occur at the beginning of words or internally. The title of Michael O. Tunnel's story is alliterative: *Mailing May*. Ask your student if he would have liked the title Mailing Samuel or Mailing Betty as much? The way the words sound together is one of the important factors in choosing a good title. Not every title is alliterative, but titles that are alliterative generally sound good when you say them. Remember the lessons in *Five in a Row* Volume 2 for the story *Down, Down the Mountain*? What were the names of the two children? (Hetty and Hank) With the letter H beginning both of their names, these names were both memorable and alliterative.

Mailing May also has an excellent example of hyperbole (HY per bowl E) which is the use of exaggeration, usually for great emphasis. In the first sentence of the story May says that Ma and Pa promise her she can visit her Grandma Mary who lives a million miles away. Obviously, Grandma Mary did not really live a million miles away. But, to a young girl, Grandma's house seemed that far. The author's note at the end of the story says it was seventy-five miles from Grangeville (where May lived) to Grandma's house in Lewiston. The sparing use of hyperbole is a writer's choice and brings interesting variety to a story.

Language Arts: Writing - Fictionalizing a True Incident

This is a lesson possibly for your older student. The story of *Mailing May*, we are told on the author's note page, is a taken from a true incident. The author, Michael O. Tunnel, took the basic facts and simply added extra details to make up a story. From his made up story we hear what Ma and Pa and May are thinking and saying, though no one knows exactly what really happened. With your student, find an incident in the newspaper or in a magazine and from just a few facts found in the article, try creating a story to go along with these facts. Think of dialogue and plot and characters with plenty of sights, smells, sounds, etc., just like Michael Tunnel did in *Mailing May*!

Language Arts: Vocabulary

boar hog	either a male hog, or a wild hog
steel	a strong alloy (mixture) of iron and carbon
trestles	wooden or metal frames with attaching braces that hold up bridges or roads
poultry	a group of animals including chickens, ducks, geese or turkeys
spell	a country term for "awhile" as in "stay a spell"

Art: Cover and Story

(**Teacher's Note:** Use this lesson first before any reading of the story. Have the title covered if your student is a reader. If your student is already familiar with the story of *Mailing May* just skip this lesson!)

The events of this story seem so improbable. It might be fun to talk about the cover picture and try to think about what the illustrations of the little girl, the stamps, and the suitcase might mean. Ask your student what he thinks the story might be about. Your student may say, "It looks like a story of a girl traveling." You might respond (pointing to the stamps), "What are these? What might they have to do with the story?" It's hard to imagine anyone figuring out the story line, so you can say, "Well, let's read the story and find out!"

After you enjoy May's adventures, you can return to the cover illustration and discuss how the picture fit the text.

Art: Illustrator - Ted Rand

If you have progressed through the first three volumes of *Five in a Row*, you probably recognize *Mailing May* as yet another Ted Rand illustrated story. Ted Rand's vibrant watercolor illustrations may seem familiar. You will probably have studied *Paul Revere's Ride*, illustrated by Ted Rand, as well as The *Wild Horses of Sweetbriar*. By this time your student will begin to recognize certain characteristics of Mr. Rand's paintings. (Beginning to recognize similarities in a painter's work is learning to recognize his style! In all three stories they can find examples of yellow light shining from lamps, candles, through windows, lighting up faces and animals in a familiar way.)

There are also familiarities to the "tuck in bed scene" in *Wild Horses of Sweetbriar* and the picture where May's mother "wakes her up" in *Mailing May*. In the same way, with the books side by side, compare the faces in the families to each other. Can you tell that the same artist did these two books? Maybe he uses some of the same models for his work.

Ted Rand has a variety of art techniques in *Mailing May*. His painting of grand scope is visible in the scene where May is riding on the mail cart toward the giant steam engine and in the picture of the train on the trestle, both the on the title page and the across the double dedication page. The home scenes are warm with light and are full of color.

Mailing May is the only story of the three *Five in a Row* studies where Ted Rand uses the technique of adding the "photographs" look. (The photographs are actually painted, too.) The use of the "photograph look" connects and unifies the illustrations throughout the story. This technique also gives a feeling to Tunnel's reminisce style story of the events as being ones that actually happened. It is as if the reader shares with the family, as he hears the story while leafing through the family photographs—memories of times past. Isn't it amazing how the illustrations of a story add depth to the author's texts? (The author never mentions the photographs but the illustrator's idea of using (painted)

photographs helps make the story seem more real. Excellent books often result when the illustrator deepens the impact of story with his creative artwork!)

Art: Learning How to Braid

On the first page of *Mailing May*, your student can see Mary standing on a braided rug. Has your student seen this type of rug before. You can see examples of this type of rug in museums in the Colonial American sections. Even today, you can find braided rugs for sale at your local large department store. You may want to use the story of *Mailing May* as an opportunity to teach the skill of braiding. Learning to braid can be useful in making rugs, place mats, bracelets, rope, or even as a hair style.

If you think your student would enjoy trying a lesson in braiding , there are books on braiding a rug, and many booklets that teach the braiding of hair, embroidery floss bracelets, etc. Some of these are available at your library and some you will find at your local large bookstore. Boys might enjoy learning to make a braided leather lanyard or belt.

Art: Drawing People to Show Their Character

Based only on what you can see from the pictures, what kind of girl is May? Notice the body language on the first page. (Explain that body language is the positioning of head, arms, legs, etc., that tell you, without any words, what a person is feeling.) On this first page, May has just been told that there isn't enough money for her longed for visit to her grandma's. Look at her stance: her sweet face is raised and her arms are back (not on her hips as if she is angry, nor are her hands in a fist as if she were upset.) In the illustration of May asking for a job at the department store her face is lifted, hands clasped in back. At the post office she appears a little shy, then a look of surprise covers her face as she realizes she is being mailed! At the end of the story the reader can see her happiness and relief upon arriving at Grandma Mary's. With this information about May, gained from the illustrations and the texts, ask your student if he thinks that May is allowed to go on this extraordinary trip because she is respectful, well behaved and calm? If May had been a disrespectful, angry and rude child she probably would not have been allowed to travel to her Grandma's alone. She might also have put her mother's cousin's job in jeopardy or not been allowed to make the return trip in that special way. There are many rewards for children who have nice manners. They usually are allowed to do far more interesting things than those children who aren't respectful, and who don't follow instructions.

Art: Illustrations True to Text

The clock at the Lewiston Station says eleven thirty-five when May's train arrives. She is supposed to eat lunch with her Grandma Mary. Remind your student that as an illustrator it is important to make sure the details of the illustrations match the details of the text. If Ted Rand had not paid close attention to the text, he might have thought that a clock would be appropriate on the station roof and put just any old time on it. To

be effective as a children's book illustrator the artist has to be observant and willing to faithfully render the words of the text in his pictures.

May yearns to visit her Grandma. She even tries to get a job to help pay for her own ticket. This intense desire on May's part is faithfully painted in the scene where she is racing into her Grandma's arms. In this illustration as May runs toward Grandma Mary her hat, her hair and the mailing tag all fly backwards giving an excited sense of action and of her joyful forward movement. The look on her face seems, too, to be one of great relief (after her big adventure) as she flies into the safety of Grandma Mary's arms!

Art: Detail in Illustration

On the page where May asks for a job at the department store there are some interesting details in the illustrations. Look at the ceiling in the picture. This type of patterned ceiling was often made of pressed tin metal squares. You may know a shop or restaurant that has these old style ceilings. If so visit with your student and help him realize that what he sees in books he can often find around him! In the same way you can point out the scrolled cash register and point out antique ones that you see from time to time in shops. Antique stores often use antique cash registers to ring up sales.

Look at the coffee grinder. It is large and red—the wheel is visible in the picture. You may be able to show your student one of these antiques at a coffee shop or antique mall.

Now, look at the picture of the Lewiston station with the horse carriage in the front. How many clues can your student find that show that the temperature at the station is very cold? (There is snow in the picture and there are icicles. You can see people's breath. You can see the horse's breath. The carriage driver has a blanket, and red cheeks and nose, etc.)

At the Lewiston station notice May's suitcase carried by Leonard. Now check the book's front cover illustration. The entire cover is her suitcase! Did your student notice that before?

Art: Creative Painting

In the illustration of May visiting Mr. Alexander's Department Store, there is a photograph of May with a snowman. It is a traditional snowman, made with three balls of snow and dressed. On black paper using white tempera paint or white chalk have your student fashion the snowman of his dreams. It can be any shape or kind that he desires. Suggest that he might show some snow on the ground as well.

Math: Reading a Clock and Using Time

May's mother's cousin, Leonard, said May would eat lunch at Grandma Mary's. What time does the train arrive at Lewiston Station? Look at the clock on the station

roof. It says: eleven thirty-five, so May will be at her Grandma's before noon and just in time for lunch!

You can use this as an opportunity to introduce clock skills to your student. If he is already familiar with telling time, review or continue with more advanced lessons involving time, like knowing how to read a numbered clock as well as a digital one, and understanding military time.

Math: Weights and Measures

In the illustration of May at the post office she stands up on some giant scales. Her weight is recorded and stamps are purchased according to that weight so she can be mailed to Lewiston. Use this opportunity to discuss with your student, at whatever level is appropriate for him, the subject of weights and measures. You can discuss ounces, pounds, tons, etc., used often at the post office, and also at the grocery store for weighing food items. (Well, maybe not tons!) In addition there are many lessons to be learned about liquid measure and metric measure.

Just for fun, you could make up a monetary scale of postage required, so much for a half pound package, a two pound, four pound, six pound, etc., all packages headed to the same destination. Then find a scale (a bathroom scale will do) and weigh various items (a book, a pillow, a pair of shoes, etc.) to find out how much your pretend posts would be to send them on their way. Design some stamps or mailing tags and put them on the items. Use a little wagon for the mail cart and if you have built a pretend train you could even take the parcels to their destination point!

[**Teacher's Note:** An older student may enjoy learning more about various types of scales. There are tiny scales that scientists use to measure small amounts of chemical substances, postage scales for letters, scales to weigh food portions, balance scales. There are even giant scales at roadside weigh-stations designed to way 80,000 pounds or more as a semi-tractor trailer truck drives onto the scale. Each of these scales are used for different purposes and have different histories.]

Math: Stamps and Money

When we mail a letter or a package* we use stamps, just like May's father did when he mailed her to her grandma's. Stamps cost money and they are usually purchased at the post office, sometimes at a grocery store, etc. Stamps come in specific various denominations (amounts of money). Find the common denomination of the day for mailing a letter and show your student. How much is a single stamp? How much would it cost for a book, sheet or roll of stamps? Your older student may be able to use multiplication to figure this out if he knows how many stamps are in a book or on a full sheet and he knows how much each individual stamp costs. You can also go with your student to the post office and see what other denominational amounts stamps come in and why. Some are used to mail postcards, extra postage to foreign countries, etc.

You may want to mention to your student, that people collect and save stamps. The older (or more rare) the stamp the more valuable it is. It can be worth far more than its original price.

Also, your student may hear someone speak of food stamps. These are not stamps used for mailing letters or packages, but they allow people to purchase food that the government has helped, in part, to pay for.

*(Another name for package is parcel, hence the term parcel post. May was delivered to her Grandma by way of parcel post! Service for parcel post had just begun in January of 1913. In February of 1914 May was mailed!)

Math: Geometry - Shapes

When Ma and Pa make May go to bed early, they tuck her under a red, white and blue quilt. (The yellow in the picture is from the lamplight.) This quilt has two main shapes in each quilt block. Can your young student name them? (They are a triangle and a square.) The strips connecting the blocks are made from both long rectangles and squares.

Have ready prepared some thick cardboard pieces, in these shapes, preferably painted or covered with construction paper in red, white and blue. Let your young student try to put the pieces together like a puzzle using the illustration in the story for the pattern. An older student could also, with help, actually make a pillow in the same pattern as May's quilt. He could make it for himself or give it as a surprise to a younger sibling. Or possibly a relative or friend would enjoy making a pillow for your student to cuddle up with at reading time.

You can also use this opportunity to explore other geometric shapes: "May's quilt has rectangles, squares and triangles. Why don't we find some other shapes and name them."

Math: One Hundred and Two Pennies Saved Gets May to Grandma's

May's parents can't afford a train ticket. Does your student remember what the ticket cost? (The ticket cost $1.55. It is not clear whether or not this is a two-way ticket, but we assume it is. Do tell your student about the concept of one way and two way tickets.) How much does it cost to mail May? (It cost fifty-three cents. Can your student figure out how much May's parents save? (Her parent's save $1.02. This does not seem like a great savings but in 1914 when this story actually happened that would be a significant amount, perhaps as much as forty dollars in today's spending power. Help your student understand the concept of how buying power changes by sharing with him some common products, such as bread, milk, gasoline, etc., and what they cost when you were his age.)

Science: Railroad Mountain Engineering - Trestle and Tunnels

In the story *Mailing May* you can see an enormous **trestle**. (Look on the title page, the copyright-dedication page and the mail car scene where May feels sick on the train. These structures which support bridges or roads were, in the timeframe of the story *Mailing May*, built of timber and spanned deep valleys in the mountainous regions. Trains could not take steep grades up the mountainside (inclines) and steep grades down the mountains. It was impossible for the engine to pull a heavy train up at such a steep angle and it was far too dangerous for the heavy train coming down! So, **architectural engineers** (*not* the engineers who operated the trains) solved the problem by designing a structure that could go across the valley floor and create a platform to support a railroad track crossing high above from one side of a mountain to the other. The supporting wooden frameworks that held up the bridges are called trestles. The trestle bridges made train travel possible in the mountains and cut valuable time off more indirect routes. (Today bridges and undergirdings are made of steel and concrete.)

There are also railroad **tunnels** that scare May—surely they were long and dark! Can your student think of why trains would have to go through tunnels? Again the answer is in the topography (the lay of the land). Sometimes it was easier to tunnel through a mountain than to go over it. So, by using blasting material and structural methods, tunnels were made through portions of the mountains.

Science: Human Body - Saliva

After May is weighed for postage, the Postmaster, Sam licks a stamp. Isn't it a funny thing to think that people can lick a stamp because their mouths make a liquid called saliva? There are other ways to affix a stamp, like wetting it with a sponge, but if a person licks a stamp to put it on an envelope, he has made use of the fluid called saliva. Moistening stamps is not the reason the human body produces saliva however. Does your student know what saliva actually does? **Saliva** is produced by the body to aid in digestion. When your student eats, saliva is produced by several glands and released as he chews. Both the chewing, which breaks up food into small pieces, and the saliva which moistens food making it soft are important in the digestive process. Saliva also has an enzyme that breaks down starches into sugar. Let your student slowly chew up a soda cracker. When he first begins to eat the cracker it will taste starchy, but if he eats slowly and allows his saliva to mix with the cracker, the starches will begin to turn to sugar and the taste will be sweeter than at the beginning. There are excellent diagrams of the glands that produce saliva pictured in *The World Book Encyclopedia* under Saliva.

Science: Domestic and Wild Animals

If you feel your student is ready for a lesson on the differences between domestic and wild animals, take this opportunity to discuss the subject. In the story of *Mailing May* there are a number of animals. Look with your student and make a list of all the animals you can find. You might include: house cats, chicks (baby chickens also described as poultry), a boar hog, a horse in harness and a caged bird. Begin a discussion on the separate categories of domestic and wild animals. Domestic (or domesticated) animals are

those that live with man, or are under the care of man. Some domesticated animals do work for, man, such a herding dogs, or horses. The domestic animal category distinguishes those animals that live with or are cared for by man from wild, untamed animals. Continuing to discuss these differences, see if you can put the animals you listed before in the correct categories. You could make a T graph like the one below. Can your student think of some other animals for each category that are not listed in the story ?

Domestic	Wild
Cat	Boar Hog
Bird	
Horse	

Chickens (are in the animal category called, **poultry**, which also includes ducks, turkeys and geese.)

Your young student probably won't memorize this new information but from time to time you can remind him again and ask if he thinks a certain animal is wild or domestic.

Science: Animal - Boar Hog

Remind your student that in *Mailing May* the steam engine was compared in (a simile) to a boar hog. Whereas boar could mean any male pig or hog, in this case it probably means a wild boar. Wild pigs (also called wild boars) are very vicious with big teeth and charging dispositions. Wild boars would be a good simile for a puffing great steam train!

Science: Steam Power

Mailing May is set in the early 1900s when steam trains were used to carry passengers, mail and freight. What does your student know about steam and steam power. If he completed *Five in a Row*, Volume 1, he may remember *Mike Mulligan and His Steam Shovel*. He may also remember seeing a pin wheel move by steam power. If you asked your student to make some steam—what would he need to use? Would he know that making steam takes an energy source (a fire, electric stove, etc.) and water? In which picture of our story can he see what the steam engine uses to make steam. (He cannot see the wood or coal, made into a fire for the energy source. But, there is a picture—one of the photographs—that shows a water tower! Trains would pull up to the water tower, take on water in a tank and when the wood or coal fire had warmed the water to boiling (in tanks called boilers) the steam would cause the pistons to turn the wheels of the train and the train would move!

Continue teaching your student about steam powered machines. Wherever he is in his knowledge, take him a step further.

[**Teacher's Note:** There are also two pictures of teakettles with steam pouring from their spouts in the illustrations of *Mailing May*. In this case the steam only shows the water is hot enough to brew tea or coffee, it isn't actually being used to do mechanical work.]

Science: Nutrition & Health - Comfort Food

When the man at the department store can't give May a job, he notices she is very sad. To help her feel better he offers her candy—which May says doesn't really do much to cheer her.

Many times people turn to food when they are bored, nervously uncomfortable, or sad. Usually this means that they eat, not because they are *hungry* but because they don't feel well in their emotions. Sometimes the food seems soothing at the moment. But, as in May's case, it doesn't solve their problem or their disappointment or really take their hurt away. While some foods really are comforting, frequent eating for emtoional reasons can become a bad habit resulting in poor health.

Can you and your student think of other ways that might help (more healthy ways) to find comfort during times of stress? Answers might include talking with someone, listening to music, reading a good book, etc. Choosing these types of activities may not take away all the stress either, although often they can, but these activities will not do as much damage as constant eating comfort foods! In fact, eating larger amounts of comfort foods high in sugars, fats and salt on one day, will actually cause a person to feel worse, physically, the next day.

Good healthy nutrition dictates that a person watches the amounts of fats, sugar and salt in their diet and steers away from those foods that have excessive amounts of these three ingredients. The American Heart Association sets guidelines for amount of fat intake and sodium. The suggested fat intake is not more than 30% of the total calories for each day. There is also a difference in the kinds of fats a person can consume. You can find interesting information on this by searching the Internet for the American Heart Association at http://www.deliciousdecisions.org/ee/wbd_easy_main.html that lists facts about different kinds of fats and amounts suggested.

Bible Lessons

May has to learn to deal with **disappointment**. She cannot visit her grandma's at just the time she wants to (indeed the time she was promised). May could throw a temper tantrum. She could secretly be angry with her parents. But, she chooses a wiser way. She stays free from **anger** (Ephesians 4:26), and though she is still disappointed, she tries to get a job to help, and **waits** (Psalm 40:1). The text of the story doesn't tell the readers if she **prays** and asks the Lord for help or not. But, you can talk about the fact that it is also extremely wise to avoid anxiety over situations and let your requests be made known to God. (Philippians 4:6) Happily, May's answer does arrive and she is extremely happy! (Proverbs 13:12!)

Ephesians 4:26

Psalm 40:1

Philippians 4:6
Proverbs 13:12

May's parents are sad because they cannot keep their promise to their daughter. They want to give her things that are good for her and that are important to her. Matthew 7:9-11 talks about **parents** wanting to give good things to their children and how much more their **Father in heaven** desires to give them good things!

Matthew 7:9-11

May' s parents apparently promise her that she can visit her grandma's. She is so excited. Then her parents tell her that there is not enough money and her trip will have to be postponed—for what seems to May too long a time! Discuss with your student the facets of **making promises and keeping your word**. Telling the truth and keeping your word is an extremely important topic. It is what builds trust between people. When that trust is broken, it sometimes takes a very long time to build it up again. But, there are times when circumstances intervene and someone cannot keep their word. Perhaps an aunt has promised to take a child to the movies on Saturday morning and she becomes sick on Friday night. Like this example, there are an infinite numbers of reasons why someone might truly not be able to keep a promise. Learning the difference between **willfully breaking a promise**, or **having circumstances truly prevent you from keeping your word**, is an important lesson of maturity. Perhaps May is old enough to understand that her parents cannot change the fact that the money for the ticket is not there. (That is, not until they have the idea of parcel post!)

Psalm 119:105

Look at the oil lamps glowing in the illustrations for Mailing May. Does your student know that **God's Word is like a lamp** for us—so we can see the way to walk in life? Psalm 119:105

Remember when May does not get the job she asked for from Mr. Alexander at the Department Store? When Mr. Alexander sees that May is sad, he offers her peppermint, but she says that it doesn't do much to make her feel better. Has your student ever reached for food when he was sad or disappointed? Some people call the food we eat in those situations, comfort food. But no matter how wonderful it tastes, comfort food really doesn't solve the problem. Discuss with your student other ways to deal with sadness, loneliness and disappointment. (Suggest that people read the Bible, pray, sing, or talk with a Christian friend rather than try to solve their problems with food.)

Proverbs 20:10

Leviticus 19:36

Remember the big scale that May had to stand on at the post office to be weighed? The Bible has several verses about scales! One interesting one Proverbs 20:10 says that people who would cheat by having different weights or scales (ones calibrated to their benefit) would greatly displease the Lord. Honest weights and measures are what Christians are to use for everyone they deal with. Leviticus 19:36

RECIPES FOR REMEMBERING THOSE SPECIAL VISITS WITH GRANDMA

These recipes are reminiscent of a trip to Grandma's complete with fragrant chicken pot pie (could be called "Grandma's Traveling Chicken Pot Pie") and luscious homemade chunky applesauce along with a special oatmeal cookies. The delight of family together just can't be beat and this meal will add to the joyousness of the occasion

Chicken Pot Pie

2 tablespoons butter
1 onion, chopped
2 stalks celery, chopped
3 carrots, chopped
4 tablespoons flour
4 cups chicken stock
2 potatoes, peeled and diced (Don't forget to mention Idaho!)
2 cups shredded chicken
1 tablespoons chopped parsley
1 1/2 teaspoons dried dill weed
1/2 cup frozen peas, thawed
salt and pepper to taste
1 prepared pie crust (scratch or store-bought)
1 egg, lightly beaten

Preheat oven to 350 degrees. Melt butter in saucepan and cook chopped onion until tender. Stir in celery and carrots and cook for 2 minutes. Stir in flour and cook for 2 minutes. Add chicken stock and bring to a simmer. Add potatoes and simmer until tender. Stir in chicken, dill weed, parsley, peas, salt and pepper. Pour mixture into casserole. Top with pie crust and brush with egg. Bake for 30 minutes until crust is golden.

Homestyle Chunky Applesauce

8 cups chopped, peeled apples (about 3 lbs.)
1/2 cup packed brown sugar
2 tsp. vanilla
1 tsp. cinnamon

Combine all ingredients and place in a large saucepan. Cover and simmer over medium-low heat for 30-40 minutes, or until apples are very tender. Remove and mash until desired consistency is reached. Serve warm (with whipped cream!) or chilled.

Oatmeal Butterscotch Cookies

1 cup unsalted butter
3/4 cup brown sugar -- packed
3/4 cup sugar
2 eggs
1 teaspoon vanilla extract
1 teaspoon cinnamon
1/4 teaspoon ground ginger
1 teaspoon baking soda
1/2 teaspoon salt
3 cups quick-cooking oats
1 1/2 cups flour
1 2/3 cups butterscotch chips -- 1-11 oz package

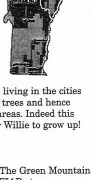
Preheat oven to 375°
With an electric mixer on medium speed beat butter, brown sugar, and sugar until fluffy. Next, add eggs and vanilla extract to the bowl. Reduce speed to low and add cinnamon, ginger, baking soda, and salt. Continue beating and gradually add oats, flour, and butterscotch chips. Drop 1" of dough onto ungreased cookie sheet. Bake at 375° for 8 minutes for chewy cookies or 9-10 minutes for crispy cookies. Remove from oven and cool on baking sheet for 3 minutes. Move from baking sheet to wire racks and allow to cool completely.

Makes 3-4 Dozen

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	Snowflake Bentley
Author:	Jacqueline Briggs Martin
Illustrator:	Mary Azarian
Copyright:	1998
Award:	Caldecott Medal
Summary:	From the time he was a boy, Willie loved snowflakes. But how could he capture them so the world could appreciate their beauty? This is a warm-hearted story of persistence and passion as Wilson Bentley triumphantly captures a snowflake in a photograph!

Social Studies: Geography - Vermont, U.S.



Willie Bentley lived in Vermont. Vermont is in the northeastern United States. Find this state on your map and place the story disk for *Snowflake Bentley* on it. The name Vermont means *green mountains* and Vermont has a mountain range running through its middle from north to south. Vermont also has valleys and forests. As we learned in our story there is a lot of snow in Vermont. The average snowfall is 90 inches with even more in the mountain areas. Compare this amount of snow with the average snowfall of your state or area. (This information can be found in *The World Book Encyclopedia.*)

Besides having snow that falls as "commonly as dirt," Vermont has dairy farms, and manufacturing businesses. The people generally live in more rural settings, as Vermont has fewer residents living in the cities than any state in the United States. Well known for its Sugar Maple trees and hence Maple syrup, Vermont also boasts wonderful skiing in its mountain areas. Indeed this state is known for its picturesque beauty. What a wonderful place for Willie to grow up! He must have loved every bit of natural beauty there.

Vermont presents many interesting topics to study including "The Green Mountain Boys." When looking into these topics, continue to tie them into the FIAR story you are studying. You can do this by saying such things as, "While Willie was growing up and learning at home, he must have read about the Green Mountain Boys" and possibly he

wondered, just like you do, what life was like in Vermont back then and what it would have been like to be one of the Mountain Boys."

Any topic can be tied in some way to the story and it will be more interesting and memorable if it is. Find a good book about Vermont at your library and browse through it with your student. Delve into a topic area that your student finds interesting and find out more about it.

*The Green Mountain Boys were an armed groups of Vermont men around the time of the American Revolution. They were lead by Ethan Allen.

Social Studies: Education at Home

William Bentley, the main character in our story *Snowflake Bentley*, was a real person. This is a short biographical work of his life. One of the interesting things that we find out through Jacqueline Briggs Martin's writing is that Willie was schooled at home. While his mother taught him many lessons, Willie was such an enthusiastic learner that he read many things for himself, discovering marvelous facts about the world around him. It even says he read the encyclopedia by himself!

There are many famous people who have been schooled at home and homeschooling is now a mainstream educational alternative to public or private school education. During the days of the pioneers many students were taught at home. It wasn't until almost 1800 that public school education became available in the United States. Additional study of various types of education is really aimed at your older student. Your younger student may just be interested to know that Willie was educated at hom.!

One of the wonderful scenes in the story of *Snowflake Bentley* is when Willie expresses his longing for a camera with its own microscope and his parents spend their savings to buy him one. This is an excellent example of parents believing in and enabling their children to pursue a true dream. You might enjoy a conversation with your older student about how the camera cost as much as ten of Willie's father's cows, and how Willie used this microscope and the ways it helped him realize his dreams. Discuss the articles Willie wrote, where his pictures were sent and how his fame spread.

Social Studies: Character – Persistence

Talk with your student about William Bentley and his **persistence**. (You may need to define this word for your young student.) Together with your student, find examples of Bentley's persistence in the story. (Jacqueline Briggs Martin tells us in her biography of Snowflake Bentley that his first pictures of snowflakes were failures. Did this stop William? Willie waited until the next year when snow came to Vermont again. He maintained his interest in snowflakes all that time and waited many months to begin his photographic experiments again. He also worked outside in the snow in extremely cold conditions enduring tedious waiting and backbreaking labor to capture just the right snowflake image with his equipment. He continued his work for many long winters.)

Thomas Edison was another persistent man who left us a wonderful quote: "I have not failed 10,000 times. I have successfully found 10,000 things that won't work."

Talk with your student about the meaning of this quote. Then think about keeping a notebook (or bound blank book) of great quotes. As you fill this book with quotes that you have gathered during your homeschooling adventure it will become a family treasure of wonderful memories and fine sayings.

If your student studied the *Five in a Row* lessons for *The Glorious Flight*, by Provensen, he may remember Papa Bleriot. Certainly here is another example of persistence as Bleriot tried many flights and built a great many planes before he reached his goal!

Also, if you have time, find a copy of *What an Awful Mess* by Robert Quackenbush. This is the story of Charles Goodyear and his persistent work in the search for a way to vulcanize rubber. It is both humorous and informative!

After reading about and discussing all these famous people, can your student see any applications and benefits in being persistent? Does he feel like this is a character trait he possesses? Does he know of someone he would describe as persistent? (You can also discuss the fact that being extremely persistent in one area or endeavor does not necessarily mean a person is persistent in all things.) Just for fun, your student could make up a new invention and write an entirely imaginative piece about how persistent the inventor had to be to see his invention working.

The following books are excellent works on inventions and inventors of things you see and use every day. They make great additions to libraries where the student can take them out every so often and enjoy them over and over: *Steven Caney's Invention Book* is a collection of modern inventions—things such as the tea bag, zippers, etc. and written in a format which both educates, delights and inspires children. Also, Catherine Thimmesh's *Girls Think of Everything: Stories of Ingenious Inventions by Women* is a delightful look at the history of a variety of inventions. (Boys could not help but find this one interesting as well.)

Social Studies: Character: Motivations for Persistence

Ask your student if he knows what it was that made Willie so adamant (determined-persistent) to capture snowflakes on film? Re-read pages 3-5. Can your student explain what bothered Willie so much? (Willie thought that snow was beautiful in the same way that other people might think butterflies and apple blossoms are beautiful. But while he could catch a butterfly and show it to his friends or take a branch of apple blossoms and decorate the table for the enjoyment of the family, he could not show anyone a snowflake because the snowflakes melted before he could even draw them. There was no way that he could save, collect or share his beautiful snowflakes!)

It was this passion to share—to have as many people as possible be able to enjoy the beauty of snowflakes that kept Willie standing in the cold and doing the back breaking labor of capturing those images. (People who have this passion to share what they

themselves have learned are really teachers in the truest sense of the word.) Because Willie wanted to teach and share what beautiful things he had seen, he needed a workable technique to accomplish his goal.

Discuss with your student what motivates Willie. What are the kinds of things that he becomes excited about and will spend his free time exploring? Does he dream of places he could visit and collect travel brochures? Does he want to make the largest collection of insects in the neighborhood? Does he want to find people to help and do odd jobs for them? Listen to the ideas he shares and ask him why he feels the way he does? What is it about doing these activities that brings him satisfaction? These answers would be the motivations for his actions.

With your student, look at the picture on the title page of *Snowflake Bentley*. This woodcut illustration suggests that Bentley is a person who is enthralled with the nature around him. Willie enjoys the snow he could see out his bedroom window. At the very end of the book, there is a quote directly from William Bentley. Bentley says that getting one's daily supply of milk is important, but just as important for each individual is what Bentley wants to provide a look into a world that so often goes unseen but is incredibly beautiful. He obviously thinks that people need beauty as well as food to eat. Turn to his quote and read it with your student. Can your student begin to understand the passion for people to see nature's beauty that allowed Bentley to labor over his work?

Language Arts: Informational Material in the Margins

Jacqueline Briggs Martin found a great deal of information on Snowflake Bentley. In an effort to make an easy, readable story she placed the words of her story on the text pages, but she included much additional material in the margins. For your first or second reading, you can just read the story without the margin material. Then begin adding it in or add in the portions of information from the margins after a full reading of the story. If you recall, Virginia Lee Burton used this same technique in the *Five in a Row* story selection *Katy and the Big Snow*. Older students reading these stories for themselves will decide as they go how they wish to incorporate the margin details.

Language Arts: Biographies

This story of *Snowflake Bentley* by Jacqueline Briggs Martin is a biography of William Bentley. Ask your student if he knows what a biography is. Has he read many biographies or had them read to him? Does he enjoy them as much as a fiction story? Biographies are books written about a *person* using facts and information about their life. A well-written biography is enjoyable to read and exciting, as well as informative. Through biographies we can learn about specific people and their unique lives while also getting a feel for the broad panorama of the historic setting in which they lived.

Language Arts: Sayings

Neighbors laughed at Willie and told him that his love of snow was silly. How did they describe the snow of Vermont? They said that it was "as common as dirt." Is this a good analogy? How much does it snow in Vermont? (Vermont's average snowfall is 90 inches a year—more in the mountain areas.) Dirt is certainly everywhere there. This is

an example of Jacqueline Briggs Martin's use of comparative analogy. She compares the commonness of snow to the commonness of dirt. In Vermont there is certainly a great deal of both! The neighbors thought that being so excited about snow was silly because it was common, yet Bentley saw the mystery and beauty in it.

Common sayings spring up everywhere—in stories, on billboards, in the media. Have your student look for examples of common sayings and write down the ones he finds in his Language Arts notebook. An example of a common saying might be: "It's raining cats and dogs" (to mean a hard rain) or "It's clear as mud," describing something difficult to understand, or "That's about as useful as a chocolate teapot!" (describing something that just will not work.) And yes, many of these sayings, are constructed around a simile or metaphor!

Not all sayings are metaphoric, however. What if someone says you can phone them 24/7? What does that mean? 24/7 means that you can call any hour of the day on any day of the week. The subject of common sayings is rather indefinite and brings up many other more specific topics such as the use of idioms, anomalies, and other categories of spoken language. The subject of common sayings is described in this lesson to bring additional awareness to your student so that he will appreciate these kinds of communications when he reads and hears them.

Language Arts: Story Beginnings

Jacqueline Briggs Martin begins *Snowflake Bentley* with the intriguing and beautiful words, "In the days when farmers worked with ox and sled and cut the dark with lantern light…" This is a particularly lovely story beginning for the biography of William Bentley. Within these words, the farm setting is brought forth and we catch a hint of the gentleness which will pervade the story.

Other stories have different beginnings. "Once upon a time..." is a common way that many fairy tales and other fictional works begin, although a writer could certainly choose to *not* follow custom and begin a true story in a fairy tale style.

Other than the common beginnings, how would your student like to begin a story? Story beginnings could be something like: Once upon a long while ago…; Long, long ago in a tiny village…; Ever so very long ago…; Once in days past…; Once upon a time far in the future…; In the season when cowboys roamed the range…; This story begins when the river had only one bend…; or Long ago, this morning…, etc.

The following is an exercise in free thinking much like using a crayon and just letting one's hand slide all over the paper. It is an exercise sort of like brainstorming where your student can just think of *possibilities*. His ideas don't have to be perfect or even something he might actually want to use. It is an exercise to help him see how much variety and creativity there is to an opening sentence and to help him be a little more aware and appreciative of interesting story beginnings when he finds them in his reading.

For this lesson, put on some background music (quiet classical music is good) and give your student ten or more minutes to just think up as many interesting story beginnings as he can. Have him write them down and put them in the Language Arts section

of his notebook. (If your student is a not writing yet, let him dictate to you.) When he is given assignments to write stories in the future, maybe he will remember to look to see if there is a good opening sentence he might use.

If you are keeping a specific journal of beloved quotes throughout your homeschooling years, you could include incredibly great story beginnings in your quote book as well. The story beginning from *Snowflake Bentley* would certainly make a wonderful addition to your collection.

Language Arts: Vocabulary

intricate	small and detailed
pelted	hit repeatedly in rapid succession
negatives	in photography, this refers to the film itself where the light and dark areas are reversed
images	pictures or photographs
magnify	to make something appear larger
etching	an art form created through the corrosive properties of an acid

Art: The Caldecott Medal-Artist Award

According to the American Library Association, "The Caldecott Medal was named in honor of nineteenth-century English illustrator Randolph Caldecott. It is awarded annually by the Association for Library Service to Children, a division of the American Library Association, to the artist of the most distinguished American picture book for children."

Most artists do not write their own books and having an excellent story to illustrate is always a thrill. Jacqueline Briggs Martin wrote a wonderfully perceptive and captivating story about Snowflake Bentley, while the artist Mary Azarian did the tinted wood-block prints for the book.

See if your library has a poster of all the Caldecott Medal winning books. With your child study the poster for each book's media, styles and techniques. Many libraries have the Caldecott Medal books together on one shelf. You can also take each book and simply look through it for the artwork. See if you can tell what medium the artist used. (If you can't decide, it often tells on the copyright page.) Look at the lines of design, use of color, and other techniques of each artist. Whether or not you enjoy each of the Medal winning stories, the art for these books is interesting to observe and compare.

Art: Woodcut Art

As an opening for this lesson, after you have read the story together, turn back to the first page and just spend a few moments looking at the illustration of the farmer walking from his barn to his house by lantern light. Isn't this a beautiful picture? The soft purple blue glow of the snow and the soft, almost old-looking red jacket and the warm yellow light of the house are lovely. What other details does your student notice and enjoy? (Perhaps he enjoys the spike-like look of the back woods, or the shoveled path or the way the warm yellow light of the house makes the whitish snow look even colder as well as the snow drifted into the barn's window sills, etc.) Now that you have carefully examined and appreciated a single illustration of the story, discuss how Mary Azarian accomplished these lovely woodcuts.

Mary Azarian is an artist skilled in painting and drawing, but she has found a particular passion for woodcut art. Woodcut printing consists of drawing designs onto a piece of flat wood. Once this is done, all the parts that are not drawn are cut away with knives. Then the finished carving is spread with ink, and a piece of paper is pressed onto the woodblock. There are various methods for pressing the paper onto the inked block. When this step is complete the paper is carefully removed and dried for several days. The ancient technique of woodcut carving has been used for centuries to print multiple copies of a single carved work. Azarian adds then, to her woodcut prints for *Snowflake Bentley* by hand tinting the paper print with watercolors.

Linoleum block carving might be suitable for your older grade level student to try. Supplies for this artwork can be purchased at art supply stores and large chain hobby stores. Remember that all lettering that is used in the art design must be drawn on backwards for the finished print to be readable! For your younger student, let them watch you carve a simple design or picture and tell them that their part will be to ink the block and make the print on paper!

Azarian has many beautiful books using the same basic medium that she uses for *Snowflake Bentley*. Perhaps you would like to look at some of them: *Barn Cat: A Farmer's Alphabet*; and *A Gardner's Alphabet*. These books are not only beautiful examples of woodblock art but they are also full of interesting information and are great vocabulary builders!

There are other artists who specialize in woodcut (or wood block) art. Perhaps you are familiar with the children's picture book artist Tejima. This artist has created many books such as *Owl Lake* and *Fox's Dream*. As your student becomes aware of the art form known as woodcut, he will begin to notice it in books, magazines, and museums!

Art: Photography

What better time to determine if your student has an interest in photography than during your study of *Snowflake Bentley*. If you don't have a camera your children can use,

purchase one, even if it is the disposable kind. There are many simple beginner's books on photography to help learn how to compose and frame a picture type, etc. at your library.

An older student who is seriously interested in photography, may want to learn how a camera actually works. Or he may want more information on composition, contrast, depth of field, etc. This older student may be interested in black and white photography, color photography, digital photography, etc., Or perhaps he wants to learn about the history of photography, and famous photographers such as Ansel Adams, Margaret Bourke White, etc. For any of these topics you can help him research by internet, at the library or perhaps find an amateur or expert to teach him more about what they know.

Art: Negative Space

Here is a lesson tied to the story by using a word from the process of photography: *negative*.

In a work of art, **negative space** is considered the areas of the picture which are empty—free of objects. A picture usually does not have objects touching in all areas. A house drawn onto a piece of paper would be positive space while the empty area around it would be called negative space. Artists and illustrators pay attention to the ratio of positive to negative space depending upon the emotion or message they want to portray in their picture. A tiny house on a vast wind swept plain might project a very lonely appearance, while a cottage in the foreground of a painting with trees and a walk (less negative space) might look more homey. When one speaks of negative space in works of art he is also referring to the *balance* of positive space to negative space. If there is a large figure in the foreground of a picture then there might be some negative space in the opposite diagonal corner of the picture for balance.

As an exercise, go through some children's picture books (one's that have good artwork) and some books of famous artists if you have them. Take time to look at the composition of the pictures and begin to note the areas of negative and positive space in pictures you particularly enjoy.

Art: Snowflake Crafts

Intricate and beautiful snowflakes can be made from paper by folding the paper into a pie shaped wedge and cutting out portions of the paper. When unfolded there is a snowflake. (Good sharp scissors are essential for this craft!) Web sites on the Internet have patterns for paper snowflakes. If you own *Five in a Row Holiday Through the Seasons*, dont forget to make use of the recipe for fast growing beautiful crystal-type snowflakes on page 76. These snowflakes can be used for decorating and for use in package wrapping. There is one pattern for cut out snowflakes at the end of this story unit.

Math: Counting by Sixes, or The Joy of Multiplication!

The book *Snowflake Bentley* centers on the subject of snow. We know that a snow crystal has six sides. Let's do some counting with groups of sixes. Find a quantity of pennies, stones, shells, etc., and make ten groups of sixes. Count two of the groups with your

student and discover that two groups of sixes make twelve. Keep counting more groups and recording the results. (You will use these totals a bit later.) Now this can be a straight counting lessons for a student that has not yet been exposed to multiplication, or it can be an interesting introduction to the concept of multiplication for an older student. Write out the six multiplication tables on a piece of paper. Look at the problem of three groups of six and note the multiplication answer. Now count the total of the three groups of six. Then explain that it is easier to know how many shells are in three groups of six (because you have memorized the multiplication facts) than it is to count every time. Counting becomes tedious if you have to recount each time to find how many items are included in each additional group of six. But if you have memorized (as your student will someday) that four (groups of) sixes are 24, and seven (groups of) sixes are 42 then the job of finding out how many are in each grouping has become quicker and easier. Seven groups of six? Why that's forty-two. No counting! That is the joy of multiplication.

Math: Geometry-Snow Crystals - Hexagons

The story *Snowflake Bentley* offers your student an opportunity to step into the world of Geometry.

Most (but not all) snowflakes have six sides (or arm points) and are considered generally hexagonal in nature. Ask your student if he knows what a hexagon is. Beginning with a triangle (which is a closed figure made up of three straight sides), can he go on to name some four sided figures? (Square, rectangle, rhombus, trapezoid, parallelogram.) What about a five equal-sided closed figure? (Pentagon) Six equal sided? (Hexagon) *That is where the snowflakes come in!* Eight? (Octagon)

Beginning to explore the different kinds of closed figures is an introduction to one aspect of Geometry. Often children love learning about shapes and figures and how they can fit together, and where they see these figures used. Can your student name a common octagon? (A stop sign) What shape is a traffic yield sign? (Triangle) What is the shape of a honeycomb made by a bee? (Hexagon)

Let your student watch for shapes in use around him and let him ponder the thought that a baseball diamond is actually a square!

Math: Making a Gauge to Register Snowfall and Rain, and Graphing Results

To make a snow and rain gauge, take a two liter plastic soda bottle and cut off the pouring spout beginning where the bottle narrows. You should now have a straight cylinder which is open at the top. Set the bottle on the edge of a table and using a ruler and a permanent black magic marke, mark your rain gauge in one inch or 10 centimeter increments starting at the bottom of the bottle and working upwards. (For areas that often receive more than two feet of snow in one storm, cut the top and bottom off of another two liter bottle and squeeze one overlapping the other tightly.

When it snows, record the complete snowfall and then bring the bottle inside so the snow will melt. Now record the amount of water in inches or centimeters. Which is greater—the measurement for the snow or that of the water? Your student will find that many inches of snow melt into far fewer inches of water. If he is able to do this experiment each time it snows and records his results he will discover that the snow is always greater. He may make some hypothesis about the ratio and what he has observed that so much snow usually results in this much water melted.

The ratio of the amount of snow to the water amounts will vary slightly as some snows are less full of moisture than others. In areas where there is a lot of snowfall your student will already be aware of this phenomenon from making snowballs. Sometimes the snow sticks together easily and is heavy (greater water content) making good snowballs while other times the snow is dry and powdery and makes poor snowballs.

You can also help your student decide how he can graph the results he has gathered. The form this graphing takes will depend on how many results your student has been able to obtain over a length of time. (Making a good graph would work only in areas with consecutive or frequent snowfalls.)

Science: Butterflies

Butterflies are often beautiful—in their colors and in their flight. William Bentley thought so! They are fascinating to watch up close. Find a flower garden and sit still awhile and watch the activity of butterflies with a pair of binoculars. Enjoy these creatures as they flit past in a whirl of energy and hue! Watch carefully as a large butterfly lands on an open flower and sips the nectar through his **proboscis** (tube-like mouth part for feeding).

There are many different avenues that you can explore surrounding the topic of butterflies. If you have already learned the life cycle of a butterfly then review that lesson briefly or skip it and go on to another, adding to the information you have previously presented.

How do butterflies eat? Which ones make use of camouflage or mimicry to avoid enemies? Which ones live their entire life cycle and die in one locality and which ones migrate? Learn about the scales that cover a butterfly's wings. Look at these with your field microscope.

A pocket sized field microscope is an affordable two by six inch black plastic cased rectangular microscope that you hold in your hand and use to look directly at the surface of leaves, fabrics, bark, and butterfly scales, etc. You can purchase one of these—or one for each student—inexpensively at ®Radio Shack Stores. This small investment will open up wonders for your student in his nature observations.

Here is a link to Radio Shack on-line service showing the pocket field scope:
http://www.radioshack.com/searchsku.asp?find=63-1133

Topics for Study

Life Cycle of a Butterfly. A butterfly begins as an egg which is usually laid on (or attached to) a leaf which becomes the tiny caterpillar's food as soon as the egg is hatched. When the caterpillar has grown (it will shed it's skin usually several times as it grows larger) it begins to ready itself for the next stage of life. The caterpillar will find a suitable place, shed its skin for the last time and begin to form a *chrysalis*. The chrysalis will harden. Inside the caterpillar will *metamorphose* (change) into a butterfly. Eventually the butterfly will emerge from its chrysalis, spread and dry its wings and then fly away.

Difference Between a Butterfly and a Moth. There are several basic differences between butterflies and moths in their adult winged stage. The butterfly's body is usually thinner than the body of a moth and a moth's body may be more hairy. The butterfly has feelers that almost always are slender thread-like and end in a little thickening, while the moth may have feathery or straight feelers. Butterflies usually rest on trees and flowers with their wings closed while many moths rest with their wings open. Moths are usually less brightly colored, though there are exceptions. Butterflies fly in the daytime while most moths are seen at dawn, dusk or at night. Butterfly caterpillars form a hard chrysalis while moths tend to make silky cocoons.

(**Teacher's Note:** A common exception to this is the Tomato Horn Worm; a large green caterpillar which in its adult stage is the Hawk Moth, buries itself in the ground and forms a hard pupa shell. The adult moth later emerges from the ground. Because there are so many areas where tomatoes are grown, this is a wonderful opportunity to see the life cycle of this amazing moth. You'll know that a tomato plant has a tomato horn worm on it by observing branches that have been stripped of their leaves. If you look very carefully over and under each leaf, you will eventually find the caterpillar. Place it in a ventilated gallon jar, with four inches of garden soil at the bottom. Fill with lots of fresh tomato leaves and sprinkle with just a bit of water occasionally. When the caterpillar is ready to go through his change he will drop to the bottom of the jar and burrow into the soil. Take out the tomato branches and put in a stick or two for the moth to crawl up when it emerges. At some point, you will find the adult moth in the jar on top of the soil. Even though this is a lesson on butterflies the Tomato Horn Worm is an excellent subject to study and note the differences between moth and butterfly. If however you see white protrusions sticking out on the back of the green hornworm caterpillar, leave that one alone, as it has parasites. A pure green one is what you want.)

Butterflies, and Skippers

Butterflies and skippers have some basic differences. The body of the skippers is usually more plump than the body of the other types of butterflies, and the antenna of the skipper is slightly different as well. Despite the fact that they are named as skippers they are classified together as butterflies.

Collections

Beginning a butterfly collection or a photographic butterfly collection. Many enjoyable hours can be spent learning about butterflies through collecting or photographing them. There is so much to learn from time spent observing, categorizing and enjoying these insects.

Butterfly Scales

The wings of butterflies are covered with hundreds, sometimes thousands of tiny scales in different colors which together form an overlapping mosaic pattern to create the beautiful colored wings of butterflies you see. Look at the wing of a butterfly through a viewing scope or microscope to realize the wonder of their shape and pattern!

The patterns of the butterfly scales can be for safety as well as beauty. Scientists think that the eye spots on the wings of various butterflies and moths help draw predators away from nipping the body of these creatures, and the predators nip the wing instead.

If you are able to view some butterflies and moths in the wild or in collections, look for the beak marks on the outer wings of a few of the butterflies. These are the ones the birds missed—the ones who got away!

Camouflage, Mimicry and other Safeguards

Many butterflies have similar coloring to their territorial plants or tree bark. This **camouflage** helps disguise them from their natural enemies.

If your student spends time actually watching the activity of butterflies, he will note that some butterflies fly erratically and quickly while others seem to float almost aimlessly along. The Monarch, that wonderful large, orange, black and white, familiar butterfly has a fluid in its body that tastes bad to birds. Birds have learned to leave the Monarch butterflies alone. Due to this safeguard, the Monarch does not have as many enemies and can fly slowly and gracefully through the air. Those butterflies that do not have such a safeguard must keep on the move and dart quickly to avoid predators.

There is a butterfly which looks a lot like the Monarch. It is called the Viceroy. The Viceroy does not have bad tasting fluid in its body, but because it looks so similar to the Monarch (slightly smaller with some added wing bars) the birds leave it alone as well! The Viceroy is an example of **mimicry** in nature. Mimicry is when one creature mimics or looks like another as in the way a Viceroy looks like a Monarch, in order to escape predators. (**Teacher's Note**: Mimicry also means acting like something else. You can witness thisin the song of the Mockingbird as he cheerfully mimics or "sounds like" several other bird species.)

Finding Books on Butterflies

(**Teacher's Note:** Remember that if you get just any identification book on butterflies, it might turn out to be a book covering butterflies of the world. There are many beautiful and captivating butterflies from the tropics, and other parts of the world. However, if you want an identification book of butterflies that your student would be more likely to see, make sure you find a local or regional identification guide. Your conservation department may have helpful information. Sometimes they even offer color posters of butterflies of your area.

Classification in the Animal Kingdom

Butterflies (as well as moths) are in the Order **Lepidoptera** (lep a dop te ra) which means "scale wings." Let your student say this interesting word a few times just for fun: *Lepidoptera*. Again this is not material for the *Five in a Row* age group to be required memorization, but this material serves as an introduction.

Science: Microscope

William Bentley wanted to have a camera with a built in microscope. Can your student remember from the story what Bentley wanted to do with the camera? How big is a snowflake? Can you see the tiny parts? Does your student have an idea of what a microscope is and what is does? What would Bentley's camera/microscope do? (It would allow him to take pictures of snowflakes that were large enough to see all their intricacy and beauty.)

Ask your student if he knows anything about the invention of the microscope.

Who invented the **microscope**? (A scientist named **Jaansen**. His invention was furthered by the improvements of another scientist named **Leuwenhook**.)

How does a microscope work? (A microscope multiplies the apparent size of the specimen through a series of glass optical lenses.)

What are the different kinds of microscopes? (There are many different kinds of microscopes from the very simple ones, up to and including the electron microscope. Each of these microscopes have different functions and applications.) If your student is interested this topic can really expand! Remind him to make notes of his personal research on microscopes—how they work and the different types and their use, and add them to his science notebook.

Science: Crystals

What do snowflakes, salt and sugar have in common? They each have a crystal form to their make-up.

Has your student made the astounding discovery of the world of crystals? Crystals are beautiful and amazing. Many types of substances have their own crystaline form and you can tell with a simple hand held rectangular field microscope* the difference between sugar crystals and salt crystals. Sugar crystals have variedquadralateral crystal structures while salt has a uniform square crystal structure. Salt under a microscope looks like a pile of little cubes. There is such beauty and consistency of pattern in different types of crystals. Crystals make a wonderful subject to study and enjoy.

What other common substances besides sugar, salt and snow have crystal properties? (Rocks and minerals have crystal formations in their make-up.) Have your student try looking at various rocks including granite with his hand-held microscope?*

Get a simple book on crystals from your library and learn about the beautiful and interesting world of crystal formations! [**Teacher's Note:** Stay away from the books that claim some sort of spiritual properties from crystals. These types of books are in no way a part of the studies of the amazing aspects of learning about crystals. Most simple children's science books on crystals will be fine.]

Here are some supplemental ideas for your lesson time with Snowflake Bentley. This web site has an excellent explanation and illustrations of sugar and salt crystals and shows how to grow them. http://www.unmuseum.org/excrys.htm

Here are two books that you might like to have on hand from your library: *The Snowflake Man* by Duncan C. Blanchard. This an an adult biography for your own information from which you may find some small pieces to share. Also, a book called Snow Crystals by W. A. Bentley and W.J. Humphreys containing 2453 photographs of snowflakes--an amazing book of Bentley's own work. You can look up Snowflake Bentley on your Internet search engine and find some of his snowflake photographs that way, as well.

*(See the above lesson on Butterflies for a description of this microscope.)

Science: Botany - The World of Flower and Fruit

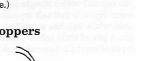
Remember how Snowflake Bentley loved nature and thought that apple blossoms were beautiful?

Has your student made the discovery of the correlation between *flowers* and *fruit*? Has he ever personally observed the progress of an apple tree or other fruit tree through its flower and fruit stages? If he looks closely he will see, as the flower petals fall off the tree, the part of the flower called the ovary that was left behind from each fertilized blossom. If he continues to watch day by day he will see this rounded ovary begin to swell. Eventually, this swelling will result in an apple, peach or cherry, etc., depending on the variety of the fruit tree. It is truly a wondrous miracle of nature!

You can obtain a book about this process or use *The World Book Encyclopedia* to explain but it will not be as exciting for your student as witnessing the real process that

he sees when he watches a fruit tree produce its own fruit. (Remember that a rose bush will produce a fruit in the form of rose hips, so there are other ways to personally witness this fruit production if you don't have access to a fruit tree.)

Science: Biology: Grasshoppers



Share with your student that there are more than 18,000 species of grasshoppers in the world! William Bentley saw only a few of these, but he enjoyed and was amazed at the ones he did see. Discuss any of the following topics:

The body of the grasshopper has three parts: the **he** and **abdomen**.

The body is covered in a stiff shell like material called an **exoskeleton**. Unlike creatures that have an internal skeleton made of bones, grasshoppers have outer or exoskeleton.

Grasshoppers also have **wings** and **feelers** and **jointed legs**. Catch a grasshopper in a jar and let your student closely examine the eyes, mouth parts, wings, jointed legs (how many different sections?), etc. Have him draw this creature and write about what he has noticed. He can put this work in his science notebook or in his nature journal if he is keeping one.

Arthropoda is the **Phylum** classification given to creatures with jointed legs and segmented bodies. This phylum includes grasshoppers, and other insects, as well as spiders and crustaceans (crabs, shrimps, lobsters, crayfish, etc.). If you have the ability, let your student examine the legs of a grasshopper, crayfish or crab and to see for himself how the legs of these **arthropods** are all **jointed**.

A grasshopper belongs to the **class Insecta** in the classification system of the Animal Kingdom. List the classification system categories for the Animal Kingdom in order (see Teacher's Note below) in a column beginning with Kingdom at the top. Then next to phylum write Arthropod (jointed legs) and then list grasshopper, crayfish, crab. Next to class write Insecta (animals having three pairs of legs, three main body parts-head, thorax, abdomen, antennae and sometimes wings) and list grasshoppers, lady bugs, May beetles, butterflies, etc.

Let your student examine this list and see if he can begin to understand that the system of classification of the Animal Kingdom is a way to group similar animals together for the purpose of study. The Class category is smaller than the Phylum category. That is, several classes of animals go together to make up the phylum Arthropoda. The class Insecta is included in the classes (the crayfish would be from another class, the crab yet another) that together make up the jointed leg phylum of Arthropods. The crab, crayfish and the grasshopper all have jointed legs and all belong to the phylum Arthropoda, but the crab and crayfish are different from each other and neither have three pairs of legs, antennae or three body parts which is defining characteristics to be a part of the Insecta class.

[**Teacher's Note:** For your own information the order of the classification system for the Animal Kingdom is as follows: Kingdom, Phylum, Class, Order, Family, Genus, Species. This information is *not* necessary for the *Five in a Row* age group to know or memorize. However, briefly mentioning words like phylum or arthropod now and then will set the stage for positive learning adventures in later years.]

Grasshoppers must watch out for such **predators** as birds, lizards, spiders and rodents. Between one and five inches long, grasshoppers can jump up to twenty times their own body length. Some grasshoppers spit a brown bitter liquid as a defensive behavior in response to being handled. Simple books on grasshoppers found at your library or your own encyclopedias and reference books, as well as live specimens will help your student create diagrams and label insect parts for pages in his science notebook or nature journal. Maybe your student would enjoy the challenge of finding a live specimen of a new arthropod each day for a week. He might even amaze you if one of the days he points out a live lobster at the grocery store. Have fun examining those legs up close!

Science: Weather and Snow

Sometimes the snow that falls is made up of at least some single flakes, but many flakes are clusters of flakes together and fragments of other flakes that cling to and fall with the cluster.

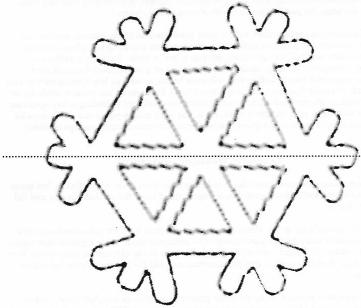
Ice crystals high in the atmosphere are responsible for such phenomenon as sun dogs, a common name for the phenomenon of a columnar cloud of ice crystals that makes a bright rainbow like light—but in an upright column in the sky, not an arch shape. Your student may want to research this phenomenon and add the information to his science notebook.

Topics for advanced study for those greatly interested in weather: Snow belt—which state or area of your country gets the largest snowfalls? Why do you think that is? (Research regional weather patterns, mountain ranges etc.) Which country of world has the greatest amounts of snowfall? (This topic may *introduce* ideas such as jet streams, warm and cool ocean currents, etc., if your student is interested in understanding why some areas receive more snow.)

Science: Snow and Sports

Snow makes possible a number of sports adventures. Can you student name some? Skiing (downhill, slalom), ski jumping, cross country skiing, snow boarding, tobogganing, sledding, the luge, snowmobiling, snowshoeing, etc. Many of these sports activities are common in the northern United States and in Canada and some may be familiar to your student from the Winter Olympics.

Perhaps there is a particular sport with which your student is not familiar and that he would enjoy researching. His research might include the history of the sport, famous participants, types of training involved, and basic gear requirements. He could create a notebook or lap book in which to display or record his research.



Cut Along This LIne

Photocopy this page. Cut along the horizontal line as indicated. With the snowflake image on the outside so you can see it, fold exactly along the horizontal axis of the snowflake (in the middle) as marked. Keeping your paper folded, (you are going to eventually achieve a pie shaped fold) fold along the next snowflake axis bringing two of the triangles together. Finally fold along the last axis and bring the last inner triangle over the rest. Your snowflake should now be a wedge shape. Now cut around the outside of the snowflake following the outline. Finally, fold the entire piece in half one more time and cut out the inside triangle. This is a very simple pattern and you will find more intricate ones with an Internet search. Happy cutting!

Bible Lessons

When reading *Snowflake Bentley* with your student, you may wish to remind him of special verses in the Bible that have snow in their wording. Isaiah 1:18-20 speaks of "sins becoming white as **snow**" through the work of the Lord.

Isaiah 1:18-20

Psalm 51:7

In the Psalm 51:7 a repentant sinner's prayer, the petitioner asks for the Lord to purify him and wash him so he will be "whiter than snow". When Jesus rose from the dead Matthew 28:3 says that he had the appearance of lightning and his raiment was white as snow.

Matthew 28:3

Remind your student that the Vermont winters where William Bentley lived are quite cold. There are some interesting Bible verses that are connected with the idea of cold. Genesis 8:22 speaks of heat and cold tied in to a promise! In Matthew 24:12 Jesus warns of people's love growing cold and in the story of Peter's denial of Jesus it says in John 18:18 that he was warming himself at a fire because it was cold.

Genesis 8:22
Matthew 24:12
John 18:18

William Bentley was captivated by the **beauty** he saw in the **natural world** around him. He reminds us of the many Psalms that joyously speak of the wonders the **Lord has created**. Read some of these with your student as you marvel, along with the Psalmist and Bentley over the beauties in nature. Psalm 8

Psalm 8

Not only did Snowflake Bentley see marvels in nature and enjoy them for himself, he was **passionate** in his desire to share and make known the beauty he saw around him. This reminds us of sharing the good news of Jesus Christ. For those who have experienced the wonders of forgiveness, the beauty of the Lord's holiness, the marvel of the Holy Spirit filling and guiding, causes a **passionate** desire to share, to show, to find some way to help others to meet the Lord for themselves!

RECIPES FROM THE GREEN MOUNTAINS OF VERMONT

Even the green mountains of Vermont get snow—and lots of it. When it's cold and blowing this New England stew pot will warm you up. The hearty Oatmeal bread (made from leftover steaming hot breakfast) is deeply satisfying, making a good partner to the chicken and sausage stew. With all that snow and all those flakes, a snowball dessert is just the thing!

Chef's Corner: The Snowball desserts can have the frosted tops rolled in coconut, like the traditional snowball cake treat, or sprinkle the white frosting with sanding sugar (a large crystal sugar, found in your grocer's baking section) which reflects the light and sparkles like snow!

Chicken and Sausage Stew with New England Root Vegetables

This is the perfect hearty stew to eat during the harsh winter months.

2 Tbsp olive oil
12 chicken thighs, well trimmed
1 pound kielbasa sausage, cut into 1" chunks
2 c chopped onion
6 garlic cloves, chopped
1 c dry white wine*
1/4 c plus 2 Tbsp chopped fresh marjoram
2 large boiling potatoes, peeled, each cut into 12 pieces
3 large carrots, peeled, cut into 1/2 inch rounds
2 large parsnips, peeled, cut into 1/2 inch rounds
2 medium rutabagas, peeled, cut into 1 1/2 inch pieces
2 medium turnips, peeled, cut into 1 1/2 inch pieces
5 c chicken broth
3/4 c whipping cream
2 Tbsp cornstarch

Heat oil in heavy large pot over medium-high heat. Working in batches, add chicken and cook until browned on all sides, about 8 minutes per batch. Transfer browned chicken to a large bowl and pour off all but 2 Tbsp of drippings from the pot. Add the pieces of kielbasa and brown for 2-3 minutes until slightly crispy. Remove and add to the bowl with the chicken. Add onions to pot and sauté over medium heat until golden, about 8 minutes. Add garlic and sauté 1 minute. Add wine and 1/4 cup marjoram and simmer until wine evaporates, about 4 minutes.

Return chicken to pot. Arrange vegetables over chicken. Pour chicken broth over chicken and vegetables. Cover and bring to a boil. Reduce heat and simmer until chicken is cooked through and vegetables are tender, about 30 minutes. Using a slotted spoon, carefully transfer chicken and vegetables to a large clean bowl.

Boil liquid in pot until reduced to 3 cups, about 10 minutes. Mix cream and cornstarch in a medium bowl, then stir into the pot. Simmer until thickened to a sauce consistency, about 5 minutes. Return chicken and vegetables to pot. Bring to a simmer, stirring gently. Add remaining 2 Tbsp marjoram and serve.

*If you would prefer to leave out the wine, you may substitute 1 extra cup of chicken broth but the flavor will not be as robust.

Hearty Bread

2 cups leftover cooked oatmeal
1 packet dry yeast
2 tablespoons, plus 1 teaspoon brown sugar
1/4 c warm water
2 teaspoon salt
3 cups whole wheat flour
2 cups unbleached all purpose or bread flour
1/2 cup warm milk

In large mixing bowl combine warm water, yeast, and brown sugar. Set aside until foamy. In separate bowl mix salt and flours. Add oatmeal and milk to yeast mixture, then stir in flour mixture one cup at a time until you have a dough with enough body to knead. You may have to add more flour, but only 1/2 c at a time. The dough is supposed be a bit sticky, so don't add enough to make it stiff.

Knead the dough on a lightly floured surface until it is supple and elastic, about 10 minutes. Transfer to a lightly greased bowl, cover with a light, damp towel, and let rise until doubled.

Punch down the dough, and knead it to press out airholes, about 3 minutes. Divide the dough in two, and pat each into a fat log. Place each in a lightly greased 8x4x2 pan. Cover loosely with towel and let rise until doubles.

Preheat oven to 375F.

Bake until golden brown and the bread sounds hollow if tapped on the bottom, about 40-50 minutes.

Turn out of pans and cool on rack for 20 minutes before slicing. Serve with butter and honey if desired.

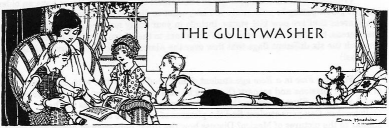
Snowballs

12 fresh baked cupcakes (can be made from any box mix flavor of your choice)
white frosting

sweetened flaked coconut, or sanding sugar (See Chef's Note above.)
marshmallow fluff

Fill a pastry bag with the marshmallow fluff. Using the pastry bag, fitted with a medium sized pastry cone and tip, you can pipe a little marshmallow fluff into the inside each cupcake by simply poking the pastry tip into the bottom of each cupcake. Frost the top of each cupcake with the white frosting and sprinkle with coconut.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.



Title:	The Gullywasher
Author:	Joyce Rossi
Illustrator:	Joyce Rossi
Copyright:	1995
Summary:	In the manner of all good tall tales, Grandfather spins out explanations of how he has come to be the man he is. Lovingly warm and breathtakingly illustrated, this story will thoroughly entertain.

Social Studies: Geography - Story Disk

Joyce Rossi never tells exactly where this story takes place. It could have been anywhere in the Southwestern United States. (Lead a quick discussion about the Southwestern United States: Nevada, Texas, New Mexico, southern California and Arizona). This story could even have been set in Mexico itself. Because Rossi is from Nevada, you might want to place the disk there, or choose the area in which you and your student think this story may have been set. (Using the San Jose Mission as a clue might help, but there may have been multiple places with the same name!)

Social Studies: Geography and History of the Southwest

The Gullywasher is probably set somewhere in the U.S. Southwest (could be in Mexico itself). Southwestern states include Nevada, Texas, New Mexico, Arizona, southern California. Remind your student that these states have a common history of having been originally settled by Mexico.

Find Mexico on the map and outline its borders for your student. He may make a map of North America for himself and color in Mexico. Your student can also make a map of the United States and color all states originally ruled by Mexico. (Check an encyclopedia for this map work.) You can then talk about how much of the United States was originally settled by people of Mexican descent.

(**Teacher's Note:** For upper grade school level students only. If you have an older student participating in your study you may want to discuss with him how Mexico governed areas that are now U.S. states. Include in your study how the U.S. gained control of these areas, the dates of the each state's entrance to the Union, etc. It is interesting to research the six different flags that flew over the Alamo, and thus the surrounding area of Texas!)

For your *Five in a Row* age student, find a good book or two with color photographs of Mexican missions and scenery. (You may be able to use *The World Book Encyclopedia*, etc.) Look at the illustrations in these books. Now look at the pictures in The *Gullywasher*. Can your student find the pictures of landscape and architecture that look similar to the pictures of Mexico? Discuss how the thick, light-colored adobe mud walls of the buildings help the occupants stay cooler. Notice too, the many red tile roofs, the arched, thick wood doorways, etc., that are seen in the Spanish-Mexican architectural styled homes.

When you pass homes or businesses that have Spanish-Mexican architecture be sure to say something like, "Look at that building, it reminds me of one of our FIAR story lessons!" and see if your student can make the connection!

You may also want to take this opportunity to make some Mexican style food, explore the customs and traditions of the people of Mexico, look at the Mexican flag, listen to some music from a Mexican radio or television station or from a recording, etc.

Spanish is the language spoken in Mexico, if you have cable you can probably tune into a news show broadcast in Spanish and just let your student hear the sounds and cadence of the Spanish language. For older students this may foster a desire to learn Spanish as a foreign language. (**Note:** There is a lesson topic below called Learning Some Spanish suitable for those students between 7 and 8 years old.)

Social Studies: Geographical Feature - Mesa

The Gullywasher provides an opportunity to study a particular **geographical feature** of the Southwest, the **mesa**. In the illustration opposite the third page of text, you can see a vaquero (pronounced vah KAIR oh) or cowboy on a rearing white horse. The land formations behind him are mesas.

Actually derived from the Spanish word for table, a mesa is a hill with rather steep sides and a flat table-like top. Some mesas are small and some cover large areas of land. Mesas are found in the southwestern states of the U.S. and in other parts of the world where the climates are hot, dry and windy.

Social Studies: Geographical Feature - Gully

Reading through the story *The Gullywasher*, your student may not be familiar with the term **gully**. A gully is a small valley or ravine that flows with rainwater during storms. Remember that during a storm in the desert, the rain may not soak into the

ground quickly if the ground is hard and dry, and therefore the runoff of water is often substantial, **erodes** (carries away dirt) and makes deeper ravines or gullies as the water, pulled by gravity runs downhill.

Social Studies: Issues in Human Relationships - Kindness

As in other stories we have explored in *Five in a Row*, this story showcases a very special relationship with a grandparent. One of the characteristics of the relationship between Leticia and her Abuelito (grandfather) is how much they enjoy being together and the loving kindness that the grandfather shows his granddaughter. This is especially evident in the ending scene where he says he doesn't mind being bent over because it makes him closer to Leticia.

Your student may have close relationship with a grandparent who tells him stories, both fiction tales and real events. If he does, he will be able to relate quickly with Leticia. In the time where many people are relocating with jobs, etc., it is not always possible to live close to relatives. Remember that great relationships can be fostered by mail if the grandparents are willing to write stories and send anecdotes to their grandchildren! If, however your student does not have a grandparent relationship, maybe you can organize time for him to spend with an Uncle, or older neighbor or someone with whom he can develop a similar type of relationship.

Social Studies: History - Cattle Drives

There was a period of time in the western United States in which cattle were raised in the southwest and then driven further north to the cities where they were sold for meat. These were the days of round-ups, songs around the campfires out on the range, long dusty trails up from Texas, of horses, saddles, chaps, coyotes, bridles, lariats and lassos, rattlesnakes and "get along little doggies." The days of the big cattle drives came to an end when the settlers began moving into the southwest in large numbers, laying claim to land that had been considered free and open, and wanting to fence the range to bring in sheep as well as cattle. If your student has an interest in this period of time find a good book at the library and enjoy learning about this colorful era of history together.

Language Arts: Tall Tales

Have you and your student read any of the Paul Bunyan or Pecos Bill tall tales, or possibly Kipling's *Just So Stories*? All these stories belong in the literature genre called **tall tales**. When the explanation of "how something came to be" or "how something happened" is written humorously and with an obvious fictional exaggeration—you have a tall tale. Fish stories about "the big one that got away" can sometimes qualify as a tall tale, as well as any exaggerated story about how something happened. The historic figure Davy Crockett was well known for telling lots of tall tales of his own. The words to the children's song about Crockett continue in the tall tale vein. In this song it was said that Davy, "Killed him a bar [bear] when he was only three!"

Children usually love tall tales, rarely confusing this delightful form of fiction with reality. It is good for your student to know what constitutes a tall tale so he can recognize them when he hears them, or when he comes across one in his reading. Your student may also have fun making up, and illustrating a tall tale of his own! See if he would like to think of something and explain in a fanciful, humorous and exaggerated way how it "came to be" or "how it happened."

The Gullywasher is a tall tale extraordinaire, with a loving warm story of how Grandfather came to be old, illustrated beautifully with vibrant watercolors.

Read *The Gullywasher* over a period of several days to your student and then read a selection from the Paul Bunyan stories. See if your student discerns for himself the idea that the stories share a similar literary form. It will be exciting to see your student recognize tall tales in his future reading.

If you have enjoyed this story you might also enjoy *Higgins Bend Song and Dance* by Jacqueline Briggs Martin. This is a fishing story tall tale with dramatically proportioned illustrations! It is a story selection for *Five in a Row* Vol. 4.

(**Teacher's Note:** Don't miss the wonderful explanation of tall tales, written by Joyce Rossi opposite the copyright page! Begin a list of names for tall tales using the suggestions from Rossi's explanation page, and then add to it when you do the lessons for *Cowboy Charlie*. Tall tales is an enjoyable genre and wonderful activity for family and group fun.)

Language Arts: Use of Jargon

Many authors make a story seem more realistic by including the "jargon." Jargon (pronounced JAHR guhn) is technical or specialized vocabulary that is used within a certain profession or group. If an author writes about space he might include such words in his story as lunar modules, solid boosters, or escape pods. Joyce Rossi in *The Gullywasher* makes use of many Spanish words to help paint her scene of an authentic Southwest. See how many Spanish words your student can find in the story. When he has found all he can, let him check his list against the Glossary (which also has the meaning of the words) at the end of Rossi's book.

Langauge Arts: Glossary

The story *The Gullywasher* provides an opportunity to introduce a new term—a part of a book called the **glossary**. A glossary is sort of like a dictionary in the back of some books. It lists special or technical words, or foreign words and their meanings. These words appear in alphabetical order. Can your student figure out how a glossary differs from a dictionary? (The main way a glossary is different from a dictionary is that a dictionary has many words, used in all kinds of context, while the glossary is sort of like a dictionary just for the special words found in a single book.)

At the end of *The Gullywasher* you will find listed the Spanish words that Joyce Rossi uses in her tall tale. Show your student other books that have glossaries. Are the words in other glossaries listed in alphabetical order? What kinds of words are they?

Remind your student that while each book has a title, an author or editor, a copyright page, etc., not all books have a glossary. It is included in a written work if the author or editor feels that it would be helpful.

If your student should write a story that includes a great deal of technical jargon or a lot of foreign words, he might want to include a short glossary at the end of *his* book.

Language Arts: Learning Some Spanish

It's fun to learn a few words in another language. As you explore a new language with your student, he may begin to hear certain common sound patterns and recognize similar patterns in spellings.

Through the years ahead, as he comes across new words, your student may be able to tell which language the word comes from. This can help with the pronunciation and spelling of these new words.

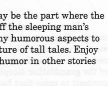
Look at the Glossary at the end of Rossi's story and pick a word or two to begin with. Each of the five days as you read the story talk about a few more. You might want to explain to older children how our English language has borrowed and incorporated many phrases and words from other languages. When we want to write stories or poems, etc., we have such a magnificent variety of words and their subtle meanings from which to choose!

Language Arts: Humor in Stories

What does your student think is funny in this story? It may be the part where the popcorn pops, or where the hummingbird steals the dark hairs off the sleeping man's head, or where the man says he carried his horse! There are many humorous aspects to Joyce Rossi's story. Remember that humor is a characteristic feature of tall tales. Enjoy each other's favorite humorous parts of this story and watch for humor in other stories that you read.

Language Arts: Literature in the Cowboy Genre

If this story has awakened an interest in the life of the old west, cowboys and all, there are many wonderful books available at bookstores and libraries:



The Holling C. Holling books, one on Indians and another on Cowboys are both beautiful and informative. (The Holling books are not always easy to find and you may need to order them from your library using inter-library loan.) *Cowboy Charlie* by Jeannette Winter is the story of western artist Charles Marion Russell. Virginia Lee Burton wrote *Calico The Wonder Horse* a story full of cowboy adventures. *Boss of the Plains* by Laurie Carlson is about John Stetson of the Stetson hat fame. *Where The Buffalo Roam* by Jacqueline Geis is an illustrated version of the song "Home on the Range," with plenty of paintings of the flora and fauna of the land. Then there is the book *Cowboy Dreams* by Kathi Appelt which is a lullaby complete with a delightful

myriad of cowboy references. Like Rossi's book *The Gullywasher*, *Cowboy Dreams* even contains several Spanish words via Mexican influence.

Your older students might enjoy a biography on Buffalo Bill or Wild Bill Hickok, or a book about cattle drives, or the Santa Fe Trail. Marion Russell's journal yielded a book called *Along the Santa Fe Trial: Marion Russell's Own Story* which is in a picture book format and is quite good. (Don't confuse this person with the artist Charles Marion Russell listed in the preceding paragraph.)

There are many other wonderful books that you can find about this fascinating topic at your libraries.

Art: Symbolism in Art

Turn to the title page of *The Gullywasher*. While, you may not be able to explain what the rather difficult word **symbolism** means, to your young student, just ask your student what he sees in this picture. There are the effects of a passing storm and a puddle of rain to wet your senses for the story. Also there is an open gate. Ask your student if he doesn't think it looks inviting just to walk through. Perhaps Joyce Rossi, in thinking of a painting for this title page, thought that an open gate would seem like an invitation to "come in and enjoy a good story." (For your older student you can say that this gate might actually **symbolize** an invitation to come in and enjoy the story.)

Art: Medium and Color

Has your student thought about the story of this book in connection with the medium the illustrator chose to use? Isn't it fitting that the medium Joyce Rossi chose for this story is watercolor? What better medium for a book about a gullywasher? For a good review, prop your book up so that you can see the full page illustration of the grandfather sleeping as the hummingbird hovers near. Take moment to enjoy that beautiful painting together and then see how many colors you can name from the picture. The longer you look the more you will see! The grandfather's white shirt is really a rainbow of colors, and the grass and the trees have much more in them than greens! Now stand back from the painting and enjoy the entire work again.

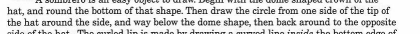
Art : Appreciating Detail in Art

Have you exclaimed over the colorful explosion of peppers on the fly leaves? How many different kinds of peppers can you find? And, did your student spot the lizard or chameleon racing diagonally from right to left over these beautiful peppers on the fly leaf pages? What about the woman grinding corn with the stone metate? Joyce Rossi's work in watercolor is truly beautiful and these pictures are wonderful for enjoying over and over.

Art: Drawing the Sombrero

In the cover picture of the man riding the horse, the rider is wearing a sombrero. A sombrero is a wide brimmed hat popularly worn in Mexico and the southwestern United States. There is a good view of this kind of hat in the scene of the big gullywasher, painted by Joyce Rossi, where grandfather recalls his sombrero was blown high in the sky.

A sombrero is an easy object to draw. Begin with the dome shaped crown of the hat, and round the bottom of that shape. Then draw the circle from one side of the tip of the hat around the side, and way below the dome shape, then back around to the opposite side of the hat. The curled lip is made by drawing a curved line *inside* the bottom edge of the hat. Shade if you desire, and keeping the light source consistent over the object. When your student is confident drawing the shape of a sombrero, he might enjoy putting it within a scene similar to Rossi's big storm.



Did your observant student notice that the hat Abuelito is wearing when he talks to his granddaughter is *not* a sombrero? It is a straw hat with a cleft crown and a different kind of brim. Abuelito wore the big sombrero when he was a vaquero (cowboy).

Math: Estimating A Minute in Time

As Leticia and her grandfather stopped at the mission a moment to rest, she asked him a question. The text says that he "thought for a minute." How close can your student come to estimating the length of a minute? Get a stop-watch or a wrist watch with a second hand and have your student say "go" to begin the minute timing. Ask him to tell you to stop timing when he thinks a minute has passed. It is interesting and fun to realize how long a minute can seem. You may also want to discuss the fact that a minute consists of sixty seconds, and that there are sixty minutes in an hour. Your older students may be able to figure out how many minutes are in a quarter hour, etc.

Math: Literary References

Another reference to time in this story is when the grandfather refers to himself as an "old timer." Discuss the meaning of this term. You might also mention that while someone might refer to *himself* in this manner, is not usually respectful to call *other people* by this term. It is a word, however, that might be used correctly in one of your student's stories, where it is especially common in tales about the old west.

Math: Computations in Weather

It is a wonderfully enjoyable thing to learn the common computation for figuring the distance of a storm based on the time elapsed between the lightning and the thunder. When you see a flash of lightning you immediately begin to count or time the seconds until you hear the clap of thunder. Divide this number by five and you should know how many miles away the storm is from you. For instance, if you see a flash of lightning and begin immediately to time the seconds until you hear the thunder, and you come up with fifteen seconds, you then divide by five and know that the storm is approximately three miles away!

For your younger student this fascinating information is enough, but your older student may want to know why this computation works. Light travels faster than sound. In fact, for our purposes light is practically instant. You see the flash of lightning immediately. Sound, however, travels much more slowly. Though in a storm, the lightning and the thunder happen at approximately the same moment, we see the light before we hear the sound. The rate at which sound travels is 1088 feet per second through air at 32 degrees F. Since there are 5280 feet per mile, it takes 4.85 seconds (5 seconds, approximate measure) for sound to travel one mile. So, you can estimate that the storm is a mile away, for **every 5** seconds that you count between the flash of lightning and the thunderclap.

Science: Terms: Flora and Fauna

Flora and **Fauna** are scientific terms for the plants and animals of a region. You might try a lesson in these terms by saying, "Flora is a big name for plants and fauna a name for the animals of a place. I don't expect you to remember this but I thought it might be fun for you to hear," and then continue talking about plants and animals. If your very young student picks these terms up and understands them, fine, but if not just do the introduction and then continue your lesson about plants and animals. The next time he hears these terms they will be more familiar to him.

Science: Flora of the American Southwest:

In the illustrations of Joyce Rossi, we can see different types of plants. Let you student look through the story and point out all the plants he sees. He may have found various kinds of cactus (Prickly Pear and Saguaro), Ocotillo*, and Palo Verde which is the state tree of Arizona.

These plants have something important in common. They are able to live in a climate with little rainfall that is often very hot in the daytime and very cold at night. Usually these plants have ways of conserving water. Some have thick waxy outer layers on their leaves. Some have leaves that are very needle-like or don't have a large surface area. Locate some colorful, good books at your library about these desert plants and enjoy finding out about how special they are.

*Some of these same plants are shown in the illustrations for Roxaboxen by Alice McLerran, a story selection for *Five in a Row* Vol. 4.

Science: Fauna of the American Southwest

In *The Gullywasher*, Joyce Rossi paints some of the animals and insects your student might find if he visited the American southwest. Have your student search and make a list of as many of these desert inhabitants as he can. His list might include the bird called a road-runner, a quail, a hummingbird, a hare or rabbit, a horse, a longhorn c (on the cover picture), a dog and a butterfly. (Don't forget the little liza on the fly leaf page of peppers.)

You can find interesting information about each of these animals and insects in your encyclopedia or in books from the library. It would be fun for your student to look up several of these animals and insects and write five interesting facts that he discovers from his own research aboug each one. He can add these to his Science notebook.

Science: Thunderstorms

The entire story of *The Gullywasher* revolves around a giant thunderstorm. You could spend years learning about thunderstorms there is so much information about them. Remember that you are building information block by block and if you have a young student, only tackle a few of these facts and ideas. You will be able to add more information later if you return to this story or in other FIAR selections such as *Storm in the Night*, etc.

Thunderstorms are characterized by dark storm clouds, the presence of thunder and lightning, and are often accompanied by strong winds and sometimes hail. Occasionally, in the winter months, there are thunder and lightning storms that produce snow as the predominant form of precipitation.

Thunderstorms are caused when a mass of warm, moist air meets cool, dryer air. These storms are common in the spring but can happen any time of the year. In *The Gullywasher*, the storm blows up quickly and with great force. In the desert, where it does not rain often, this kind of storm, with its quick heavy rainfall can cause canyons and dry river-beds to flood almost immediately. This is due in part to the fact that the ground is very dry and hard and does not absorb the rain at first, so that the run-off is substantial. Find an area of loose soil (perhaps even in a flower pot) and show your student how water soaks into loose soil. Then find a place of hard pack soil, outside or in an old pot of flowers and demonstrate how the water stays on top for awhile, or runs down the insides of the pot before even wetting the soil.

(**Teacher's Note:** If you have previously covered types of clouds you might want to take this opportunity to quickly review the names and resulting weather conditions: Clouds in flat layers are stratus clouds, often associated with rainy weather. Cumulus clouds are white billowy masses that often appear on sunny days and are associated with fair weather. Cirrus clouds are delicate, wispy, upper altitude layer clouds made of ice crystals and signal cold air at high altitude. Nimbus clouds are gray and dark often bringing rain. The combination of cumulus and nimbus clouds called cumulonimbus, tower in columns and these clouds are the harbinger of more violent thunderstorms.)

If your student is familiar with all of the above information, try a study of the prevailing winds, and the jet stream, and how they affect the weather patterns of North America. Enjoy the illustration of the little gullywasher on the first page of text. See how the rain sheets down in the picture? Has your student ever noticed that he can see rain coming down in slanting sheets out on the horizon during a storm?

Science: Earth Science - Sand

Near the end of your story it says that the smell of damp desert was strong and sweet. Part of being in a desert is seeing sand. Have a conversation with your student about sand, what it is, where it is found and ways in which we use it.

Sand is basically ground up particles of rocks. Wherever rocks are found, the wind, rain, freezing temperatures, or the tumbling action of rocks rolling along river beds will work to break off small pieces of the rock. This same breaking down action continues making the pieces of rock increasingly smaller and smaller. Scientists have a measurement for defining the size of a sand particle, but for our purposes we can say that sand grains are larger than dirt particles (not clods!) and much smaller than small pebbles.

In sand you can find many different minerals, and the color of sand depends on what kind of rock was ground down to make it. Find a simple book at your library on sand and you will see pictures of many different kinds of beaches (some with white sand and some with black) and deserts of different colors. Enjoy the interesting facts and beauty surrounding the subject of sand.

Construction workers use sand to mix along with other ingredients to make concrete. Sandpaper is made by gluing sand onto paper and cutting it into shapes to be used by hand or attached to sanding equipment. Glass is made from sand also. You can also find a book on one of these uses and have fun learning how glass is made, or how they mix concrete.

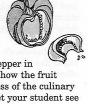
The ground of the American Southwest has areas of sand, other areas of hard clay soil, and still other areas of non clay-type sandy soil. In other words, not all of the area covered by the American Southwest is pure sand desert.

Science: Botany, Vegetable-Peppers

In the story *The Gullywasher* the grandfather says that he was hungry and gobbled the chili peppers which were hanging on the wall. Can you find that picture in your book. It is not the flyleaf picture of all the peppers, but one about half way through the story. Point out the peppers hanging on the wall. Let your student look at each page in the book and see if he finds another place where the peppers are on the wall.

Is your student familiar with the vegetable called a pepper? There are some peppers like the hanging chili peppers that are very hot in flavor and many types of peppers that are mild. Peppers come in lots of bright colors such as red,

green, yellow, purple, as well as in different shapes. If you look at the pictures on the flyleaf pages you will see some of the different colors and different shapes.



Peppers are nutritious, containing large amounts of vitamin C. There is more vitamin C in a red bell pepper than a green bell pepper. Actually the red bell is just a green bell pepper fully ripe! Cut a bell pepper in half, through the stem to the base. Let your student examine it seeing how the fruit (according to botanical definition, fruit is what encases a seed regardless of the culinary definition) is sectioned and where the seeds are attached. If you can, let your student see a pepper plant growing and examine the flowers as well.

All peppers can be dried. Some people even dry layers of bell peppers in their ovens set at low, or in dehydrators. These dried peppers are added to soups and stews, etc. In *The Gullywasher*, the chili peppers were hung to dry rather than dried in a dehydrator and this is a drying method that is commonly used in hot, dry desert areas.

For fun, try getting some pepper plants and growing them in your student's own garden, or find them and examine them in all their bright colors at your grocery store. Be careful when handling certain hot varieties of peppers. If you touch them your hands will burn and if you rub your eyes your eyes will burn, too!

Since children love dipping foods, why not visit your grocery store and find as many different colors of **bell peppers** (these are not hot) as you can. There are green, yellow, red, purple, and orange, though you may not be able to find all of them. Buy one of each and cut each in half. Using one half, take out all the seeds and julienne them from top to bottom into narrow strips. Arrange these colorful strips on a plate (or mix them up together) and put the salad dressing dip in the center. Let your student read this book over again and enjoy his treat—or make it a part of an entire Mexican dinner.

Science: Reflection

Discuss with your student the important idea that when people speak of **reflection** they might be talking about **light waves, radio waves** or even **sound waves**! All of these types of waves can hit an object and bounce. In the story *The Gullywasher* the grandfather looks into a pool of water and sees his own face. In this case it is *light*, bouncing off his face, that is being reflected.

Discuss with your student how he thinks that grandfather can see his face in the water. What does it take to make a mirror-like reflection of light? It takes a shiny object such as a mirror! In this case, it takes the smooth mirror-like surface of the water. Where there is light, it is continually bouncing off of all objects but in order to see a picture type reflection, one must have a smooth shiny surface for the light to bounce off of in such a direct way that we see the life-like image.

When you are out walking on a calm day see if you can find a pond and let your student find his reflection in the water. Why can't you see your reflection in a sink or

bathtub? Is it because the underlying surface is white? Can you see your reflection in a dark wooden bucket filled with water and sitting out in the sunlight? Look again at a mirror that has no frame. Notice the coating on the glass? This coating sets up a dark shiny surface with which to make a good reflection.

(**Teacher's Note:** At another time or with an older upper grade level student you might like to explore the reflection of sound waves and radio waves. This type of study offers an opportunity to study such topics as sonar, bats, radar, echoes, and acoustics.)

Bible Lessons

Open *The Gullywasher* to the beautiful picture of grandfather asleep on the ground. The graceful hummingbird is taking strands of his dark hair. At an opportune moment remind your student of the amazing fact that the Lord knows every hair on your student's head! According to Matthew 10:30, the Lord even has them numbered!

Matthew 10:30

❧ ❧ ❧ ❧ ❧

The Gullywasher is by definition of title about a great storm. Leticia and her Abuelito watch a real gullywasher at the beginning of the story and then grandfather tells her a tall storm tale about the "big one." He says that the rain from the storm had wrinkled his hands. This might be a good time to read some verses about the really big rain—the Flood from Genesis. Or you could take time to talk about Jesus actually calming a storm, Luke 8:22-25, or of Paul and the men he was with during storm and their shipwreck: Acts 27:14-44.

Luke 8:22-25
Acts 27:14-44

❧ ❧ ❧ ❧ ❧

There are also many references to rain in the Bible. There are verses about times of no rain, and verses about time of spring and latter rains. Elijah dealt with a period of drought: James 5:17-18. You could tie any of these references or incidents to *The Gullywasher* and have a great conversation about God and His Word.

James 5:17-18

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After telling of the worst storm he ever saw, Leticia's grandfather says that he saw the reflection of his face in the water. James 1:23-24 is a verse that makes the comparison of us looking at our reflection in a mirror then going away and forgetting what we looked like to people who look in God's Word—understand what they are to do and then go away and forget to do it. The story tie-in here is very loose. It is simply based on the word "reflection" to remind us of that reference in the Bible.

James 1:23-24

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Once again the incredible beauty of God's creation shines through the illustrations in *The Gullywasher*. Look for a while at the page with the large bird called the Road Runner and the small view of the grandfather sleeping. There is so much beauty in the flowers, trees, and the many animals, as well as the sky

and the clouds. After looking at all the lovely landscape, read some psalms—praise ones, praising God for his magnificent creation. Try singing (creating a tune) for some of these Psalms. Or try writing along with your student some Psalm-like praise yourself.

RECIPES FOR A VAQUERO ON A SOUTHWESTERN HACIENDA

The foods of the Southwest are rich in Spanish-Mexican influence and have become greatly favored in the United States as one of its leading cuisines. And the popcorn balls have the corn popped before they are eaten so there's no tall tale here!

Chef's Corner: Traditionally in the Southwest women ground dried corn with a stone bowl called a metate in order to prepare the corn meal they used for corn tortillas, sopes, and other foods. Today most of the cornmeal used is machine ground. Still the resulting foods are delicious!

Sopes

Sopes are soft, thick corn tortillas with raised edges, fried in oil and topped with a variety of meats and salsa. You can buy them pre-made in Latin American specialty shops, but making your own is simple and satsifying. You will find sopes far more warming and hearty than typical tacos.

2 cups instant corn flour (masa harina)
4 tablespoons all purpose flour
1/2 teaspoon baking powder
1/2 teaspoon salt
11/2 cups warm water
Canola oil, for frying

Recommended toppings:
Shredded cooked chicken or browned hamburger, shredded lettuce, diced tomatoes, diced purple onion, diced jalepenos, mashed avocado, chopped cilantro, shredded cheese, sour cream* and your favorite salsa.

Mix flours, baking powder, salt, and add the warm water. Add enough warm water to make moist, smooth dough.

On a lightly floured surface, roll out the dough to 1/4 inch thick. Using a 2-inch round cookie cutter, cut out sopes. Re-roll unused dough. Take each round sope, and slightly press the edges up to make a slight "cupped" shape. These raised edges will help hold in your fillings and toppings.

Heat a cast iron skillet and add enough canola oil to generously coat the bottom of the pan. When hot, slide the patties into the hot oil and fry until they are a light golden brown and slightly crisp on top, about 1 minute on each side. Drain on paper towels. Add topping as soon as they have cooled enough to be handled. Sopes do not keep well; so enjoy them quickly! Add pinto beans and spanish rice to complete the meal.

*Sour cream will work for a topping, but for a more authentic taste look for Crema Fresca Mexicana. This is Mexican table cream. It is rich, tangy and delicous -- and available in some grocery stores and any Latin American specialty shop.

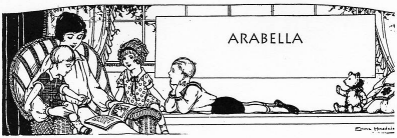
Classic Popcorn Balls

5 quarts popped popcorn
3/4 cup light corn syrup
1/4 cup butter (no substitute)
2 teaspoons cold water
2 5/8 cups confectioners' sugar
1 cup large marshmallows
Vegetable shortening for hands

In a saucepan over medium heat, combine the corn syrup, butter, cold water, confectioners' sugar and marshmallows. Heat and stir until the mixture comes to a boil. Remove from the heat. Carefully combine the hot mixture with the popcorn, coating each kernel. Grease hands liberally with vegetable shortening and quickly shape the coated popcorn into balls.

Makes approximately 15-20 popcorn balls

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.



Title:	Arabella
Author:	Wendy Orr
Illustrator:	Kim Gamble
Copyright:	1998
Summary:	Matthew sets out for a long summer of sailing and surprises readers along the way.

(**Teacher's Note:** In preparing to present this story, you may want to find some pretty shells, a model sailboat, a lighthouse or any other nautical theme items that you have. You could set them out all at once as a "teaser" for the next story or you could bring them out a few at a time as you progress through your week.)

Social Studies: Geography - Islands Around the World

Grandpa lives on an island. Yet, the story never tells exactly where this island might be. Try looking for clues with your student. There are large deciduous trees in the illustrations but there are also palm trees. So if the island is off the east coast of the North America it probably would be in the southern part. Depending on the age of your student you can talk about all the areas that could provide the setting ofor ourstory: Hawaii, Florida, the Caribbean, etc. In fact, there are islands around every part of all the continents and some islands are out in the oceans away from land. Still, there may be a further clue besides the illustrations. On the copyright page it says that the book was originally printed in Australia. Maybe the island is off the coast of Australia. The dust jacket doesn't provide specific information about the island location, but it says the author had learned to sail when she was young and now her children sail in a different ocean. The exact setting of this story remains a mystery but you can have fun learning about the different places where it might have been set. Use this story as an opportunity to study a location that is new to you, even Australia! Place your story disk wherever you decide the story could have taken place.

(**Teacher's Note:** Research provided a link to Wendy Orr's own talk about creating Arabella, you might enjoy searching this out:

http://www.wendyorr.com/books/comments_arabella.html)

Have your student progress through the thinking stage of the above lesson before you share the talk by Wendy Orr. Isn't it interesting that the inspiration for the story came from the coast of Canada, but the illustrations are Australian?)

Social Studies: Relationships and Learning

In the book *Arabella*, Grandpa and Matthew have a close relationship. Grandpa loves sailing and introduces Matthew to it hoping that he will learn to love sailing too. Spend some time thinking about the way that Grandpa accomplishes his goal with respect, gentleness and patience.

On the left hand page illustration with the pink sunset and the "round white moon" it says, "Every day Matthew learned a little more about Grandpa's boat." Talk with your student about learning something new. Most people can't learn everything about a new venture at once. Generally the best way to teach or learn is a little bit at a time. If your student is already reading, talk about how that process came about. First he learned letters, then sounds, syllables, words, sentences and finally paragraphs and stories. (For younger students pick any progressive activity and use that as an example.)

It was wise of Grandpa not to try to teach Matthew too much too soon. The boy might have burned out. Have a discussion about what the common phrase "burned out" means. This will help him understand these words and concepts when he hears them in conversation.

When Matthew asks, "How do you steer?" Grandpa quickly gives him an answer without making Matthew feel silly for asking and without Grandpa acting in a superior way. Later, Grandpa lets Matthew bring the boat to the wharf all by himself. Grandpa's words are so encouraging: "Couldn't have done better myself!" Talk about how important encouragement is when you are trying something new. Amazingly, one word of harsh or teasing criticism can wipe away many words of praise. A good teacher is careful and wise in his choice of words!

The above discussions and lessons are designed to help your student process information about teaching methods. He can think about these topics as they relate to him and the things he tries to learn. But also, he can begin to practice good leadership-teaching skills himself. Whether he is helping a younger sibling learn something new (like tying shoelaces) or dealing with an employee when your student is grown, the material in these lessons provides a foundation for important life skills.

Social Studies: Relationships and Loss

Sooner or later everyone experiences loss. Sometimes it is the loss of an object that is cherished like Grandpa's *Arabella*. Sometimes it's a beloved pet or acquaintance or relative. Take some time to discuss the process of grief. Often when we lose someone or something important to us there is an initial denial or refusal to believe it has actually happened. Then with the realization of the reality of the situation (perhaps days later) there is sometimes a deep period of depression or profound sadness—a deep sense of loss which may linger for a time. In most cases this period resolves into a feeling of accept-

ance an emerging desire to get on with the tasks of life. In cases where people find it difficult to progress to the next step in the grief process in a reasonable length of time counseling may help.

Talk with your student about a time when you lost something important to you and some of the steps of grieving which you went through.

If you studied *The Rag Coat* in *Five in a Row* Volume 1, you might remind your student of Minna and the way she worked through her grief.

Social Studies: Relationships - Being Away From Home

In *Arabella* Matthew leaves home for a long summer. Does your student think it would be fun to visit grandparents or cousins, or go to camp for the entire summer? Why or why not? What kinds of things would be fun? What would be difficult in being away from home for so long? (Answers will vary because every child is wonderfully different!) Ask your student if there is an age where he thinks this kind of summer away from home would be fun? Our story does not say exactly how old Matthew is. Have your student guess how old he thinks Matthew is and why.

There are many reasons why people, at times, have to be separated. Sometimes fathers or mothers have to travel. Sometimes parents, grandparents or siblings are hospitalized. Talk with your student about coping during times of separation.

Tell him about times when you have been separated from family or friends, how you felt and what you did to cope.

During a long period of separation, a mother once told her son, "Whenever you look up and see the moon shining—know that I am looking at the same moon, too." These kinds of thoughts along with good memories help keep people close even during times they have to be apart.

Social Studies: Sea Lore

If you choose to introduce this topic you will want to begin by saying that you're going to talk about sea lore. Does your student have any idea what that is? The word *lore* means traditions, ideas, stories, songs, superstitions, etc.,—in other words folk knowledge and customs gained through experience. If you were studying mountain men there would be stories, traditions, etc., about them. However, in this case you say, "But, we are studying things related to the sea—boats and sailing, nautical terms (terms having to do with the sea), customs, etc.

For instance, Grandpa makes several comments in the story about the *Arabella* bringing him luck. In many books you will read about happenings at sea you will recognize sailors talking about what brings them luck. It is a part of seafarer's lore. Interestingly enough the name of Grandpa's model boat is the *Arabella* which means "prayerful." So, perhaps it was just out of sailor's habit that he talked about luck.

Another tradition of the sea is that many boats are named for women. Did your student notice that the *Arabella* and Grandpa's red boat with the white sail are both referred to as "she"? If your student is a reader, let him find the places in the story this is so. Have him look for the pronouns "she" and "her" when one of these boats is mentioned. There are at least twelve references. Let your student point out a few. (**Teacher's Note:** You can talk briefly with your older student about the subject of pronouns at this time if you desire.)

In addition, when a boat's name is used it is usually preceded by the article "the" which is not in italics. We speak of Grandpa's beloved model ship as the *Arabella*. Your student will find countless references to this convention whenever he reads about boats and boating. Mentioning it to your older student now, and letting him see the words in the story will also help him learn to write theses kinds of descriptions correctly.

You may also want to mention the traditional aspect of sea lore where sailors tend to personify boats, the wind, the sea, etc. Personification is giving human traits or personality to non-human things. (Remember *Five in a Row* Volume 1, in *Mike Mulligan and His Steam Shovel* how Mary Anne, the steam shovel, had lots of personality?) The phrase "what the wind and the sea take, they don't give back," sounds like the wind and the sea have a human motives. "She's gone," referring to the boat is another example. Traditional sea lore has many references to boats, the sea and the wind having human personality. Your older student may enjoy watching for such references when reading tales of the sea.

Social Studies: Living on an Island

Would your student enjoy living on an island? What are the advantages and disadvantages? Did you notice what Grandpa carries into his house at the beginning of the story? (He carries in a box of groceries.) Some islands do not have stores and other conveniences. If you live on an island you may have to get in your boat and go to a larger island or the mainland to get groceries, see a movie or get a haircut. You may also need a boat to get to transportation on the mainland, to go to hospitals, schools, etc.

Grandpa and Matthew's breakfast on the wharf looks like fun. Is there a place where you could go to eat breakfast or lunch beside some type of water? Perhaps you might be near a river, lake, pond or ocean and a breakfast out would be memorable! Yes, life on an island could be interesting.

Social Studies: Through the Generations

Grandpa said *his* grandpa carved the *Arabella*, which means the *Arabella* could have been fifty or sixty years old! Does your student know of any items in his family that have been handed down from generation to generation? Are these items particularly valued by his family?

Grandpa also handed down stories to Matthew and a love of sailing. He says to Matthew, "You're a sailor now. Just like me and my grandpa before." Do you have similar experiences from your grandparents to share with your student? Do you know anyone who has followed in his grandparents footsteps, in profession, trade or hobby?

Social Studies: Relationships - Inferred Information

Ask your student how he knows Matthew cares deeply for his grandfather? Answers might include that Matthew is respectful and enjoys time spent with his grandpa. But, the one great way Matthew shows his deep love and concern is when he decides to rescue the *Arabella*. Matthew knows the boat can't be replaced and that it is his Grandpa's most treasured possession. Matthew risks hardship and danger to bring the *Arabella* back. Action like this shows deep feelings and care.

How does your student know Grandpa loves sailing? He never says exactly, "I love sailing!" Look for examples in the text and pictures that help you know how much Grandpa delights in sailing.

Language Arts: The Art of Story Telling

Grandpa tells Matthew stories of the sea. Some of these stories were probably of events Grandpa had himself experienced. Many may have been traditional (older) tales of the sea.

Telling stories is a wonderful art to perfect. Encourage your student to begin to try story telling. Often young children whose vocabularies are much greater than their abilities to write, will perfect their story telling skills before ever putting pen to paper. When they eventually catch up, they will know the elements of stories and have wonderful tales to write.

Historic events lend themselves to story telling and can truly make the subject come alive. Learning about family events and being able to recount these stories in an entertaining and interesting way encourages close family ties. As a teacher, try sketching out some family stories of your own and present these to your student. By doing this, you demonstrate that *you* value story telling.

Have your student make sure his story has a beginning, a middle and an end, just like a written story. Like written stories, a told-tale is more interesting if there is a conflict of some variety, action and a climax. Another facet of stories told orally is repetition. Every story doesn't use this device but often having a familiar refrain in a tale helps keep continuity and interest. A told tale should not be memorized verbatim. Rather the storyteller should have in mind an outline of the story and fill in the necessary information with lots of descriptive sentences, especially ones that help the listener see, hear, taste, and touch the incidents of the story. For instance when telling of a trip to grandma's your student might say, "and when Sarah skipped into the kitchen she could smell the rich aroma of apple pie baking in the shiny white oven. 'Ohhh!' Sarah exclaimed, 'I'm glad I came to grandma's.'" (The sentence, "I'm glad I came to grandma's," could be the refrain of the story.) Stories for young children may be kept short and whoever tells the story (teacher or student), needs to think about whether or not the subject matter will be captivating for their audience.

Unlike written stories, there are different skills for story telling that need to be addressed. A good story teller uses suspense, good good eye contact, dramatic gestures,

voice control (dynamics, both soft and loud), pacing the story and he is always careful to use extremely clear speech.

Try telling a story to your student. Let him work on a story to tell you. There are many benefits to learning the art of story telling!

(**Teacher' Note:** A wonderful beginning to the art of story telling for a very young child is the wordless book. There are many great wordless books whose illustrations give a structure for a story and then the student can fill in a myriad of details as he follows the pictures. One such book is *Follow Me* by Nancy Tafuri, 1990, Greenwillow Publishers, ISBN 0688087736. Mercer Mayer produced the extremely popular *A Boy, A Dog and A Frog* series, 1992, Dial Books for Young Readers, ISBN 0140546111. There are four books in this series and you can obtain them one at a time or in a set. These books may also be found at libraries, but if you cannot find these, there are other good wordless books you can use. Wordless books are only a *preliminary* step to story telling because the dynamics of eye contact and gestures, etc., are not present, but it is a good way for a young child to have a beginning framework for oral interpretations.)

Language Arts: Review for Italicizing Names of Ships

If you have used many *Five in a Row* lessons, your student has had many opportunities to notice that the names of ships are printed in storybooks in Italics. Review this lesson with your student and remind him that if he is writing a story by hand, a ship's name is underlined. This underlining in hand written work, is comparable to Italics in a printed book.

You may want to take this opportunity to explore and list other categories that are italicized in print (or underlined in handwritten work) including titles of books, long plays, motion pictures or musical compositions, names of magazine and newspapers, and personalized names of aircraft and trains as well as ships.

Language Arts: Joy of Words - Alliteration, Simile and Repetition

(**Teacher's Note:** One of the most pleasing aspects of FIAR teaching is that the lessons have so much opportunity for review. As the teacher, you present a topic then let your student ponder it and try it a little. You don't have to drill and drill an idea because it comes around again in another lesson. Soon your student recognizes a concept and will begin to notice examples in his own reading. He will begin to enjoy the lesson concepts and someday even use them in his own writing. Voila! True learning! So, present the information like a spoonful of sugar, in little amounts. You will find these concepts being reviewed many times.)

Author Wendy Orr has carefully chose her words for this story. Look over the pages of *Arabella* with your student for literary devices like simile and the use of alliteration. (Simile is the comparison of two unlike things using the connecting words *like* or *as*.) Examples from the story: (speaking of the boat that shot past) "*like* an arrow from a bow." Another example would be "sails lifting *like* gull's wings."

Alliteration is the succession of similar *sounds* (not necessarily letters) it can be at the beginnings of words or internally.) Examples from the story: spray splashed; wild white sail; brown bobbing; flew faster; wharf and windows.

Where in the story do you hear repetition? Have your student listen for it. Repetition can be of words, phrases, sentences or ideas. Several times Orr writes of a "small red boat with wild white sails." This refrain of repeated words is subtle and gentle as a lapping wave. It ties the story together and when you encounter the phrase you sense a comfortable, familiar feeling. In fact, the way the author uses repetition in this story actually creates a rhythm. Wendy Orr's story has a definite rhythm of rolling waves so appropriate for a story of the sea! (To enrich this lesson locate John Masefield's poem *Sea Fever* and read it to your student. It is often found in poetry anthologies. Can your student hear the beautiful cadence of the rhythm of the sea? Compare this to Orr's writing. *Sea Fever* which is included in *Favorite Poems Old and New*, ed. by Helen Ferris. In addition, search for music that has rhythms of the sea. Sea chanteys such as *Shenandoah* and *Michael Row the Boat Ashore* might be fun here.)

Language Arts: Reading Comprehension - Inferred Information

(**Teacher's Note:** This might be a good lesson to do near the end of the week after several readings.)

Ask your student why he thinks Matthew (early in the story) is so taken with flying. "I wish I could fly." Can your student think of a possible reason? Could the reason that Matthew is so enamored with flying be because he can't walk or run? Maybe his desire to fly follows his desire to be able to move about at will. Does your student have any physical handicaps? Does he know someone who does? If your student can walk and run, how would he imagine life with a wheelchair would be? Through this story we find that if Matthew is any example, even with a handicap, life can be full and exciting!

Now, discuss Grandpa's cheerful answer to Matthew's wish to fly: "Sailing's the next best thing." Grandpa sees sailing as a way for Matthew to become adept at a skill and have a way to go wherever he wants. "The wind filled the sails and the boat flew wherever Matthew steered her." Grandpa doesn't think anything needs to hold Matthew back. In fact Matthew seems to live a wonderfully full life, even to his heroic rescue of the *Arabella* at sea!

(An excellent read-aloud story for your older students to go along with this theme is *The Door in the Wall* by Marguerite de Angeli.)

Language Arts: Writing a Good Story - The Use of Suspense and Climax

Author Wendy Orr writes a good story by setting the stage and then coming up with a conflict. The loss of the *Arabella* creates a problem to be solved—a conflict to be resolved. As Matthew decides what to do about the missing boat, and then ventures out into the storm we see the rising action becoming more suspenseful. Page after page we see Matthew struggle with his boat. Have your student try to find words of suspense. Some might be: "waves crashed over the deck" or "wind became a roar"; "waves turned to

mountains"; "his boat wouldn't stop"; "tossed on the waves and slid down their valleys"; "a wild crazy dance on the crest of the waves"; "yanked the rope"; "the wind snatched it from his hands"; "fight the tug of war"; and more! These are words of danger and suspense and they make an exciting story.

Finally, abandoning hope of saving the *Arabella*, Matthew struggles just to stay alive. Where is the climax of the story? The scene where Matthew says, "I'll never get home" and strains to turn the boat around, seems to be the height of action. Will he ever see home again?

Then we begin to sense a falling action, the waves and wind begin to quiet and the shore comes into sight. As he scoops up the Arabella the conflict is also solved. Have your student try writing a story that has a conflict or problem and also an element of danger or suspense. Remind him that he can choose words to heighten the feeling of suspense, just like Wendy Orr does in *Arabella*.

Language Arts: Descriptive Sentences

The author of *Arabella* has written some refreshingly descriptive sentences. In the story, find the passage "...towards the dot of Grandpa's island." The next sentence is intriguing: "The dot grew into a wharf and a man with waving arms." This description is so familiar to anyone who has ever been out on the water. At first you just see a speck of land and then familiar objects appear and finally you can discern people!

Also, the description of Grandpa's house on the fourth page is marvelous. The words are full of smells (the salty ocean air) and sound (the whisper of the woods) and on the next page the poignancy of an elderly man's most treasured possessions. Together with your student, try crafting a sentence describing something on each side and then tell what is in-between just like the description of Grandpa's house. For example: The kitchen counter was a merry mess with half empty spice bottles on one side, dirty measuring cups on the other, and a glorious unbaked banana cake perched precariously in the middle! Another simple example could be the description of a hot dog inside the bun and condiments on each side. Try to include descriptive words of sight, sound, smell or touch.

(**Teacher's Note:** This is a lesson to try with older students.) Look at the page where Matthew is lying on his belly in the red boat during the storm. The second sentence on that page reads, "His arms ached, his hands hurt and his fingers bled....". These descriptive phrases are parallel "arms-ached, hands-hurt, fingers-bled." Each phrase has a subject verb similarity called *parallel construction*. The next page has a sentence that says, "Matthew's arms were so tired they wanted to sleep. His eyes were so sad they wanted to cry." Again we see parallel construction. This time the first sentence is constructed exactly like the second sentence. Print out the two sentences on a piece of paper one above the other. Now draw a line from the words in the first sentence that match the words in the second sentence. For instance, draw a line from Matthew's to His. Then draw a line from arms to eyes, from were to were, from tired to sad, etc. Talk about the fact that the words themselves may be different (if they weren't it would be repetition!) but each part of speech in one sentence corresponds exactly to the word below it in the second sentence. This type of literary construction establishes a rhythm and cadence (sound) to the story as well as providing interest. Have your student try to develop some paired sen-

tences and/or phrases that have a parallel construction. Example: The cat moved so quickly, it was nearly invisible. The dog moved so slowly it seemed to be sitting still.

Remind your student he is practicing a new way to add interest to his writing, just like the author of *Arabella*!

Language Arts: Lists

Find the list on page six of *Arabella*. The list is in the first paragraph. Many times writers use lists as a technique of description. For a younger student just explain that a good author sometimes uses an interesting list in his writing and read the list in this story. Think up a several topics and let your student dictate to you things that could be put on a list of that topic. Also, if there is interest let your student make up a short story making use of a list somewhere in it.

Language Arts: Complete Sentences

This probably is a lesson for older students. Your older reading student may have recognized that *Arabella's* author, Wendy Orr, doesn't always use sentences that have both subject and verbs. In other words, she doesn't always use complete sentences. This book is an excellent one to use as a grammar review. Can your student find the sentence that is not a complete sentence? (This type of sentence is called a sentence fragment.) The page where Grandpa's possessions are described begins, " Ships in glass bottles...," and continues with a list of possessions but no verb for the list. It never says Grandpa's treasures *consisted* of ships in glass bottles..., which would have used the verb *consisted*.

Now discuss with your student the concept of writer's license. Once in a while for specific reasons, writers decide to suspend regular grammar rules and write phrases that are not complete sentences. We call this writer's license. In *Arabella* Orr used license partly to establish the rhythm of her story, making her writing a kind of poetic prose. It isn't poetry but it pushes the traditional conventions to establish poetic quality. A good writer knows exactly when he is breaking the rules of grammar and has a good reason. With a good writer, using a phrase for a sentence is not just a mistake!

Language Arts: Vocabulary

(**Teacher's Note:** The following words are defined in nautical terms. There may be other uses of these words not defined here. Your oldest students may also enjoy finding other definitions of these words, i.e., different uses for the word board, hoist, tiller, deck, wheel, drift, etc.)

board	to get on a boat or ship. "Please board the *Stanley* at 6:00 P.M."
hoist	to haul or raise up.; In this story, hoist means pulling to raise the sails.
wharf	a dock or platform built out into the water at which boats may tie up (dock) or unload cargo or passengers.

tiller	a board or handle near the stern (back) of a boat used to move the rudder.
rudder	a control surface in the water under a boat used for steering or turning the boat
mast	a pole set upright (perpendicular to the deck) on a boat to which sails and rigging are attached. A boat may have more than one mast.
sails	cloth attached to the rigging to catch the wind and propel the vessel through the water
deck	the part of a boat sailors walk on, like the floor of the boat
wheel	the large spoke circle the captain turns to steer the boat. The wheel is connected to the rudder.
drift	to be carried along by the water currents and wind
figurehead	a carved statue or bust placed on the bow of the ship for decorative purposes.
yachts	boats used for pleasure or in racing. They can be powered by sail (wind) or engine or both.
jumble	thrown together without much order (not a nautical term)
white cap	the white tips of the waves when the wind has stirred them up

Art: Medium

Australian artist Kim Gamble used watercolors to capture the feel and flow of the water's waves. Notice with your student the edges of each picture and the beautiful colors, especially on the cover picture. The blue of the sky contrasts sharply with the white clouds and moves into purples at the horizon and into deep blue-greens for the water. The brown wood window frames the outdoor scene at the same time making a shelf for shells, bottles, feathers and the *Arabella* herself!

Notice on the windowsill, the blue glass bottle. Does your student realize that Gamble has painted this object so well that it appears as if you can see through the bottle to the water beyond?

Throughout the story there is action and suspense in the artist's paintings and then, Kim Gamble ties it all up neatly with his oval picture on the outside back cover!

Art: Model Ship Building

In the story *Arabella* there are two different kinds of model ships. One is a ship in a bottle. It is sitting on the table in front of Matthew as Grandpa is bringing in the groceries. The other is the model of *Arabella*, herself, which sits on Grandpa's windowsill.

Has your student ever seen a ship in a bottle? You may be able to find a shop where he can view such a wonder! Building a ship in a bottle takes much time and patience—and a very old trick. Does your student know how a ship is built in a bottle? (The ship isn't actually *built* in the bottle, but rather built and then carefully inserted *into the bottle*. A thread remains outside the bottle attached to the hinged masts which are then pulled to an upright position!) (The dust jacket says that Wendy Orr's grandfather sailed a ship with tall masts and that he built ships in bottles!) Authors who write about "what they know" often include personal bits of information in their stories.

The model ship that sat on the windowsill was built from wood, had cloth for sails and pieces of cord for rigging.

People build models of many things (cars, planes, homes, buildings, tractors, etc.). Through modeling projects people learn a great deal about their specific field of interest. Model-building is also a great vehicle for learning patience, developing eye-hand coordination and for learning to finish what we begin. If your older student would like, he can search for books on boats which show the specific parts and make his own model of a ship. He could make a model of clay, or wood. For this model small masts could be fashioned of sticks or toothpicks with string glued on for the rigging. A project such as this one can be as simple or difficult as your student wishes. Depending on the age and interest of your student, model and hobby stores carry many different model boat kits. These are also available at various levels of difficulty. You may wish to work on a model boat project together. Or, if a relative is interested in creating a gift for your student, let the model maker know it would be greatly appreciated. Have fun learning through modeling!

Art: Observing the Details

Two items you would often find in a nautical setting include binoculars and barometers. Binoculars are often used for looking out over the water. Or people close to the sea sometimes have a telescope for the same reason. In this story however, only binoculars are found in the picture. They are hanging on the wall at Grandpa's house. Also, Grandpa's house has a barometer (on the bookcase). If you have access to a barometer let your student examine it and see how it differs from a wall thermometer. (See Science lesson for explanation of how a barometer works and its basic use.)

Art: Subtle Use of Detail

Discussion: Was your student surprised after reading *Arabella* to find out that Matthew uses a wheelchair? By now you have probably gone back through the illustrations and noted that the wheelchair was in almost every illustration all along! Only in a few pictures is it absent. The illustrator, Kim Gamble, made a choice to be subtle (not show everything) with the information that Matthew needs the wheelchair. Instead he hid most of the chair from sight in many of the illustrations. There is no mention of the

wheelchair in the text by the author, and for the most part, the illustrator also chooses to keep this information a secret until the end of the story. Does your student think this is a wise choice? Why? It does seem that by partially hiding the picture information about Matthew, it gives the ending of the story a deeper emotional punch. All of a sudden the reader realizes what a truly great effort it took for Matthew to rescue the boat!

Application: If this type of artistic subtlety intrigues your student, he could write a story with an element of surprise. Then he could illustrate his story perhaps hiding some of the clues in the pictures or withholding a surprise till the end. This is a more difficult exercise and you might consider working on it together.

Art: Drawing a Boat

If you have a student interested in drawing, have him try to draw a simple row-boat. *The Drawing Textbook* by Bruce McIntyre (available from school supply catalogs) has simple instructions for drawing a rowboat. (Or *Draw Squad* by Mark Kistler!) As your student's interest increases there are wonderful, helpful books on drawing more intricate boats available at your local art store, bookstores and perhaps at your library.

Art: Dots, Lines and Curves

The story text reads, "...the dot of Grandpa's island," and "the curve of the beach..." Take this opportunity to explore two-dimensional drawing components. What can you make with dots (or points), lines and curves? Use pen and ink, or felt tip markers to make some designs. They can be free form or symmetrical designs, in monochrome (one color) or multicolor. When your student is finished, mount the best one on some black poster board and hang it up where he can see it.

Dots, lines and curves can also be used to draw pictures of real objects. Now, perhaps your student would like to try drawing houses, toys, animals, etc. When he is finished help him notice where dots, lines and curves have been used.

Art: Inferred Information - Through Illustrations

After a reading of the story, turn to the page where Grandpa is carrying in the groceries. Why didn't Matthew help with that chore? He seems the kind of boy who would gladly help anytime he was needed? Perhaps Matthew's handicap prevented him from helping carry the groceries. Look at the expression on Grandpa's face. He seems happy to be taking care of that task himself. Never in the text or pictures does Grandpa seem to over react to Matthew or coddle him but rather treats him with respect and dignity. The reader can tell this by the way Grandpa encourages Matthew and teaches him to sail. Again Matthew's handicap is never mentioned but rather conversations with Grandpa provide a helpful sense of, "You can do this!"

Math: Quarters, Halves and Wholes

In the story, Wendy Orr writes of a round white moon. We call this a full moon. As the moon waxes (appears to grow larger) and wanes (appears to grow smaller) we also talk about a quarter moon. Spend some time presenting or reviewing concepts of whole,

half, quarter, etc. You can talk about the moon, musical notes, time on a clock—quarter hour, half past, or talk about money (quarters, half dollars), etc. If this is new information use blocks or measuring cups to demonstrate "parts to make a whole."

Math: Seasons- Parts to a Whole

At the beginning of the story, Matthew is leaving home to spend a "long" summer with his Grandpa. The use of the word *long* here probably means the entire summer. Talk about how the months are generally divided into seasons and how many months are in each category. For instance, in the Northern Hemisphere the summer months are considered to be June, July and August. With four seasons having three months each (use blocks to group for young student and let them count) that makes twelve months for the whole year. How many months are there in half a year? What would be the three months of the other three seasons—fall, winter and spring?

What are other kinds of measurements that have several parts to a whole?

Science: Human Body - Blood Cells

Find the place in the story where Matthew attempts to rescue the *Arabella* and the text says that his arms ached, his hands were hurt and his fingers were bleeding. What does your student know about the subject of human blood cells?

Does he know that in his own blood there are red "donut shaped" cells which carry life giving oxygen to all his cells, and also removing carbon dioxide from his body? (These red cells have no "hole" like a donut—but instead have a depression. Does he know there are also white cells which help fight infections, and platelets which help in clotting? Does he know a fluid called **plasma** surrounds the red and white cells as well as the platelets? Thus the plasma, red cells, white cells and platelets together make up human blood.

Can your student remember the medical term used when a person, in extreme need of blood (due to injury or disease), is given blood donated by someone else? (**Transfusion**)

Fortunately, Matthew isn't seriously injured so he doesn't need a transfusion. Perhaps if his fingers were badly cut, when he arrived back at Grandpa's he might have cleaned his hands, put on some anti-bacterial ointment (to help fight infection) and possibly a few bandages to keep out the dirt.

There is no end to the wonders of this subject—the blood and the intricate ways that it moves through veins, arteries and capillaries and all the work that it does for, the human body. There are excellent pictures and descriptions included in *The World Book Encyclopedia*, if your student is interested.

Science: Health - Physical Activity

In this story the reader sees ropes. The ropes are used for rigging and mooring. Also, during Matthew's rescue of the *Arabella*, the story says that Matthew has to slide

along the deck until he catches the rope and fights a tug-of-war with the wind. Has your student ever played the game tug of war with a rope? Use this opportunity to find a long rope, gather some willing participants and play a game of tug of war. Don't forget to make a center line mark. When one team pulls the other over this mark the pulling team wins. Sometimes a game can go on for quite a while before this goal is accomplished. Take care to monitor the game and stop it if someone is caught in the rope or being hurt. This game is a great way to get exercise while remembering Matthew and his fight with the wind!

Science: Sun and Moon

"One night [Grandpa and Matthew] sailed till the sun sank red and the stars came out, and by the round white moon they sailed her home." Grandpa and Matthew enjoyed the lights in the heavens. Often sailors use the sun, moon and stars to navigate—to know where they are and to quickly pinpoint direction. (Today it is becoming more common to use GPS or *global positioning satellite* that takes its triangulated readings off of several satellites and quickly gives the sailor his exact location.)

The sun and moon are fascinating to study. Wherever your student is in his knowledge of these heavenly bodies take him a step or two further. Find simple books at the library and explore the wonders we see almost everyday. Have him draw pictures of the parts of the sun and the moon adding facts about sun-spots and moon craters to his previous knowledge.

Science: Reefs

In our story we learn that Matthew steered around rocky reefs. Reefs can be areas of rock or sand or coral which are just beneath the water. Boats must make sure that they know the charts for the waters they are sailing. The charts tell them exactly where hidden sandbars, rocks and coral reefs are located. Lighthouses are often located near reefs to show the sailors dangerous areas where they cannot come too close.

Coral reefs are magnificent areas to scuba dive or snorkle. They have lovely formations and they provide habitat for enormous numbers of fish and other creatures of exquisite beauty and interest. Coral is formed by small animals (**polyps**) that live in colonies with many others of their kind. When the animals die they leave behind connected limestone skeletal remains. The result is what we know as coral reefs—large areas of limestone formations under the water. See if you can find some video of coral reefs for your students. Enjoy the beautiful fish and other colorful components of a coral reef. Also look for a simple book for more understanding, if your student expresses interest. (**Teacher's Note**: You may include this lesson when you study the Great Barrier Reefs of Australia from the book, *The Pumpkin Runner*.)

Science: Weather Forecasting, the Barometer, Clouds and Signs

Grandpa didn't think of going out in a storm (he went back to bed) and Matthew wasn't planning on going out on the water either, he just saw the *Arabella* and wanted to save her. A good sailor knows the weather signs, reads his barometer and doesn't go sailing or boating in potentially stormy weather.

How does someone learn about the weather? Weather forecasting has different indicators. One good forecasting tool is the air pressure or pressure of the atmosphere. A **barometer** helps to predict the weather by measuring the air pressure. During times of approaching storms a barometer will show falling **air pressure** levels. As the barometer reading begins to fall, people who use the waterways will take notice and watch for other signs of approaching storms. (**Teacher's Note:** Barometers record air, or atmospheric, pressure. Atmospheric pressure is also called **barometric pressure** because it is recorded by barometers! In most kitchen-type science weather books (the ones with activities) from your library there are directions for homemade barometers.)

Another facet of weather prediction is learning to recognize the clouds in the sky and which clouds mean fair weather and which mean stormy weather on the way. There are even particular cloud formations that indicate severe weather. Find a simple book on clouds or check your encyclopedia and begin to learn cloud formations.

There are many additional signs that indicate approaching bad weather. Often you can smell rain coming when it is still a long way off. Sailors have long used signs such as rings around the moon, red skies in the morning, smoke curling low and staying low to predict approaching bad weather. Even odd signs such as crickets calls seeming sharper, hills seeming closer, and damp walls or stinking ditches, all can portend wet weather ahead. It is fun and important to become familiar with the signs of nature as well as the technologies of our time in order to know the coming weather. Again, wisdom can make the difference between life and death. A good sailor *does* wait out a storm before setting out!

Another way to know what weather is expected is consulting your local media forecasts. Even better, is listening to the Coast Guard weather bulletins. The Coast Guard broadcasts are continuous, you don't have to wait for an hourly weather broadcast time.

If you have an older student interested in learning more about forecasting the weather try to find *Eric Sloan's Weather Book*. This may be an out of print title, but it is full of interesting facts and drawings and you might be able to find it through a library search. This is an adult book. It is for the teacher to read and share parts with the student! If you cannot find this book seek out another weather and/or weather forecasting book for your student. (**Teacher's Note:** Also, the spelling of the word forecasting can be taught to your older student by reminding him that sailors need to know the weather *before* they set sail. This may help them remember to include the "e" in the word **forecasting**!)

Science: Rope and Knots

Matthew had to learn about ropes and rigging as he learned to sail the "small red boat with the wild white sail." Rope is traditionally made by twisting together thinner cords to form a thick strong length of cord. It can be made from cotton, hemp, nylon, etc. A sailor always checks his ropes for signs of wear. It is no good to tie up a boat, even using the best knot, if the rope is frayed and breaks. The boat could be lost!

Also, learning which knots, hitches and bends to use and when to use them is essential for a good sailor. Even if the rope is fresh and strong, a wrong twist at the pier and the boat floats away! This can happen because as the waves bounce the boat much stress is put on the mooring rope and a loose rope unties easily. So, the correct knot makes all the difference. Besides it is fun to learn to tie many different kinds of knots. Each one has its own uses. Matthew spent hours learning to tie knots well. Find a Boy or Girl Scout Manual (older ones can be found at used book stores), camping book, or book exclusively on knots from the library. Most books on sailing, etc., have chapters on learning to tie knots, also. Get some rope at a hardware, or a mart-type store. Or for even more fun if you have a marine store nearby, go there for the rope. It might cost a bit more but that is made up for in the "museum" like fun of seeing all the boating equipment. (If you do go to such a store, look for a barometer and point it out! How many other nautical pieces of equipment can you find?)

(**Teacher's Note:** If you introduce the subject of knots and how to tie them, during this story, you will have a chance to review, and your student will return with pleasure and a sense of familiarity to this subject as he studies the lessons in the *Above and Beyond* story selection of *Hitty, Her First Hundred Years.*)

Science: Common Animals of the Sea

Common animals of the sea can cover the spectrum of the animal kingdom. If you have an older student you may want to have fun seeing how many familiar examples you can find of ocean life that fit into all the Classes of vertebrates and invertebrates. An encyclopedia or a simple book on animal classification will help you place animals like jellyfish, starfish, crabs, sponges, as well as dolphins, whales, swordfish, sharks, sea gulls, etc., in their proper classes.

For your young student, introduce him to whales and dolphins (mammals), just like Matthew saw as he sailed with Grandpa. Talk about sea gulls (birds), fish, and shelled creatures (crustaceans). There are simple books at the library on each of these animals and the encyclopedias and Internet have pictures and information, also. Again, wherever your student is in his understanding of marine life, introduce him to something new! Much of this new information you student can draw and write about, adding pages to his science notebook, or nature journal, if he is keeping one.

Sea animals make and live in the beautiful shells we sometimes find on a beach. On the cover of the book there are some shells. Can your student find a simple book on shells and identify them? (On the cover of our story there is a nautilus, a cowry and possibly a limpet.) What is your student's favorite shell?

Again, encourage your student to learn a little more about shells than he has known before. Have your student add facts and illustrations to his science notebook, even trying drawing or sketching some of these beautiful shells and learning a few facts about the animals that live in them.

Science: Tides

Tides are not specifically mentioned in this story, but anyone living near the sea experiences the phenomena of the tides. The *tides* are the daily rise and fall of the waters in our oceans and seas. They are caused by the pull on the earth from the moon's gravity. There are two high tides and two low tide periods every twenty four hours. In the illustration on the second page where the story describes Grandpa's house you can see the water and some sand showing by the wall. It could be that the water is receding in a low tide in this picture. Low tide is an interesting time on a beach. Often you can find shells, sea animals (especially in tide pools-depressions in the sand), seaweed, driftwood, etc., that have been left on the beach by the receding tide.

To show your student how tides work, get a large flat-bottomed bowl. Put an inch of small gravel on the bottom of the bowl. Pour in two inches of water and cover the bowl tightly with a clear food wrap. Now show how the tide goes out by tipping the bowl gently and leaving wet rocks behind on one side. Now carefully let the water come back. Explain that this happens rather slowly on a beach. Still some tourists are trapped in areas like caves and on peninsulas because they are not mindful of the incoming tide! Learning about tides makes a good science lesson but it makes a good survival life-skill lesson, as well!

Science: Waves on Large Bodies of Water

Matthew had to battle the waves of the storm and then saw them quiet as the wind died down. Waves are swells or moving ridges across any type of natural water expanse. These waves are caused by wind. Depending on how strong the wind is, how much water space the wind crosses over and how long the wind blows determines the height of the waves. Waves have a high point called a peak, a low point called the trough,* and are measured by their height from trough to **peak** and their length from peak to peak. Wave action moves in a constant up, over and roll under, movement. Find a simple book at the library with illustrations of the fascinating wave cross sections and **wave action**.

*As Matthew struggles in the storm the text says his boat was tossed on the waves and "slid down their valleys." Valleys are the same as **troughs**—the lowest part as the wave falls.

Science: Sailing

The science of sailing includes topics such as wind and weather, sailing skills, water safety and much more. If your student is passionate about this subject, you may want to find a good simple book at your library to answer some of his questions. Sailing may look easy, but there is a great deal more to the science of sailing than one might think!

Sailing involves several principles of physics such as **aerodynamics** and the use of **simple machines**. Aerodynamically the sail is shaped to not only have the wind push against it but also to create a lift…like the shape of a bird's wing or an airplane wing.

The side of the sail away from the wind is curved like the top of a bird's wing. As the air rushes past it a lift is created on the convex side of the sail which happens at the same time as the wind is filling and pushing the sail from the concave side—a lift and push to propel the boat ahead. Isn't it interesting that the author Wendy Orr knows from her own experiences in sailing about this phenomenon? She writes, on the second page of the story, about the "sails lifting like a seagull's wings," and later "the wind filled the sails and the boat flew over the water."

There are so many terms and interesting facts regarding sailors and sailing (have fun exploring *The World Book Encyclopedia* under Sailing)—songs and movies, and books (some of which are listed below.) Sailing is indeed the stuff from which adventure is made. Enjoy finding out more about this interesting subject and dreaming of adventures on the seas.

(**Teacher's Note:** If your student has enjoyed studying the book *Arabella*, here are some other stories he might love as well.)

Island Boy by Barbara Cooney

One Morning in Maine by Robert McCloskey

and for older students listening in, or for family read aloud:

Swallows and Amazons by Arthur Ransome
We Didn't Mean to Go to Sea by Arthur Ransome

Swiss Family Robinson by Johann Wyss

Robinson Crusoe by Daniel Defoe

Bible Lessons

Arabella is filled with references to the wonderful **creation** that the Lord made. There are references to the sun, moon and stars, to the ocean and its waves and wind, to the trees that whisper and the sea gulls that fly on strong white wings. The story mentions islands, whales that blow from their spouts, rocky reefs and rainbow shells. The illustrations show beautiful clear weather white clouds and menacing dark storm clouds, driftwood, feathers, etc. After a reading, have your student look for all the elements of nature he can find, point out a few others and spend some time reading Psalm 146: 5-6.

Psalm 146:5-6

Psalm 50:1-2
Psalm 33:5-8

Continue with one or two of the following: Psalm 50: 1-2, Psalm 33: 6-8, Psalm 19:1 which begins a declaration of the heavens showing God's handiwork and which might go well with verses from Psalm 8, Psalm 139: 9-10, Psalm 107: 23-24 (can continue to verse 31).

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II Samuel 9

Also, *Arabella* brings to mind a Bible figure named **Mephibosheth**. Find the story in II Samuel: 9, and read it to see if you would like to correlate this story to the character of Matthew in *Arabella*.

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Psalm 107:23-24

There are various Psalms that speak of the **weather** and he who goes down to the sea in boats! Psalm 107:23-24

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Acts 27:12-44

Paul's **shipwreck** is found in Acts 27:12-44 and might prove to be a tie-in for the story of the lost model ship and Matthew's near disaster.

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Exodus 15:4
Joel 2:20
Mark 7:31

In *Arabella*, Matthew's Grandpa speaks of the sea. Can your student remember some references to seas in the Bible? (The Red Sea in Exodus 15:4, The Dead Sea in Joel 2:20, Jonah was thrown into the sea, and the Sea of Galilee in Mark 7:31. There are many other references to the word sea in the Bible.

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Luke 8:22-25

Luke 8:22-25 is the story of Jesus **calming the storm**. After reviewing the storm part of the story where Matthew is

trying to get Arabella back for his grandfather, remind your student of the storm that Jesus brought to an end in front of his disciples.

Matthew's grandfather keeps speaking of luck. What does your student think about the concept of luck? Who does your student turn to when he, himself, is in trouble? Does he think it is just luck that he asks for and receives help?

Grandpa speaks about the Arabella bringing him luck. When the boat is lost in the storm he says his luck has gone with her. We know that our fortune, well being, and salvation do not rest on things or on people, but firmly on the Lord Himself.

Can something like a boat bring luck? Discuss the point of Psalm 115 that man should not trust in things he has made, but rather in the Lord, Himself. Talk about the concept of thinking with faith and depending on the Lord, because of Christ who loved us and delivered himself up for us, rather than imagining things happen out of a blind luck. While 2 Corinthians 5:7 says that we walk by faith not by sight. Isn't that a part of why man grabs onto lucky charms, etc.? (Because he can actually see them?) So, again 2 Corinthians suggest that Christians are to live by faith in their God and not by sight (as in the case of a lucky charm).

Psalm 115

2 Corinthians 5:7

Continue to discuss these concepts with your student and read some of the great verses of faith: How does one get faith? Romans 10:17 says it comes by hearing the Word of God. John 20:30-31 says that the gospels were written so that the reader might believe that Jesus is the Christ and that through believing there might be for that person, life in His name. Psalm 118:8 says it is better to trust in the Lord than in man, while Proverbs 3:5 speaks of trusting in the Lord with all your heart and not leaning on your own understanding. In Mark 9:2 a believer asks the Lord to help him have greater faith. 1 Corinthians 2:5 is a passage that suggests our faith should not rest on the wisdom of men, but rather on the power of God, and finally Ephesians 6:16 reminds us that faith is a piece of the armor of god, our shield of faith, and we should use it!

Romans 10:17

Psalm 118:8
Proverbs 3:5

Mark 9:2
2 Corinthians 2:5

Ephesians 6:16

Matthew went after the *Arabella* in the storm without much thought to his own safety. He was motivated by **love** for his grandps. There are Bible references about laying down's one's life for love. Jesus certainly did that for the salvation of mankind and He says that there is no greater love than to do the same. (John 15:12-13) Discuss how this verse might apply to laying down's one's wishes or preferences for another, as a form of laying down one's life, as well.

John 15:12-13

Matthew didn't give up hope that he could find the *Arabella*, he simply kept trying. When you've enjoyed this story and Matthew's heroic efforts to find his grandpa's prized possession remind your student of the verse in Hebrews 6:19 where it says we have the **hope** of the Lord as a strong anchor for our souls, a hope both sure and steadfast. Boats need anchors and so do we. We have that assurance in the hope of the Lord!

Hebrews 6:19

Living on an island with the sea all around ensures that you'll have plenty of fish and fresh seafood to enjoy. Here is a mild flavored oyster soup, good for those stormy evenings by the sea and some hearty salmon for the main course. Serve with fresh green beans or a salad. Then enjoy the apple cake. McIntosh apples have their origins in Canada and indeed, apples are one of the most important Canadian food crops. Enjoy the warm aroma of apples baking and think of sunsets from an island view as you enjoy this delictable apple cake.

Delicate Oyster Soup

1/2 cup butter
1 cup minced celery
3 tablespoons minced shallots (no substitute)
1 quart half-and-half cream
2 (12 ounce) containers shucked oysters
salt to taste
ground black pepper to taste
1 pinch of cayenne pepper, or more to taste

In a large frying pan combine butter, celery and shallots over a medium heat. Cook until the shallots are translucent. Pour half-and-half into a large pot over medium-high heat. Stir in the butter, celery and shallot mixture, stirring continuously. When the mixture is nearing the boiling point, pour the oysters and their liquid into the pot. Season with salt, pepper and cayenne. Stir continuously until the oysters curl at the ends. When the oysters curl the stew is done. Take off the heat and serve in immediately. Oyster crackers make a perfect accompaniment.

Baked Salmon with Dijon Dill Sauce

1 (2- to 3-pound) salmon fillet, 1 1/2-inches thick
3 tablespoons extra-virgin olive oil
Coarse kosher salt
Freshly ground black pepper
1/2 cup mayonnaise (no substitute)
1/2 cup sour cream
3 tablespoons minced fresh parsley leaves
2 tablespoons Dijon-style mustard
2 tablespoons minced fresh dillweed
2 teaspoons freshly squeezed lemon juice
Salt and freshly ground pepper to taste

Preheat oven to 350 degrees. Line the bottom of an ungreased broiling pan with aluminum foil and spray broiler rack with vegetable-oil cooking spray. Wash salmon and pat dry. Rub with olive oil, sprinkle with coarse salt and pepper, and place skin-side down onto the rack.

In a small bowl combine the mayonnaise, sour cream, parsley, Dijon mustard, dillweed, lemon juice, salt, and pepper; cover bowl with plastic wrap and chill for at least 3 hours before serving.

Bake salmon, uncovered, 8 to 12 minutes or until a meat thermometer registers an internal temperature of 140 degrees F (salmon will be slightly opaque in thickest part). Remember the salmon continues to cook after it is removed from the heat source. Carefully remove salmon from pan and transfer onto individual serving plates. Serve with the cold mustard dill sauce.

Approximately cooking times for salmon:

1/4 to 1/3-inch - 3 to 4 minutes
1/2 to 3/4-inch - 4 to 6 minutes
1 to 1 1/2-inch - 8 to 12 minutes

Apple Cake

1/2 cup all-purpose flour
1/3 cup sugar
1 tablespoon baking powder
1/8 teaspoon salt
1 teaspoon pure vanilla extract
2 large eggs, lightly beaten
2 tablespoons vegetable oil
1/3 cup whole milk
Half Granny Smith and half McIntosh apples to equal about 2 pounds total, cored, peeled, and cut into thin wedges

Topping:
1/3 cup sugar
1 large egg, lightly beaten
3 tablespoons unsalted butter, melted
The zest of one lemon

Preheat the oven to 400 degrees F. Butter a 9-inch springform pan and set it aside. In a large bowl, combine the flour, sugar, baking powder, and salt. Add the vanilla extract, eggs, oil, and milk, and stir until well combined. Add the apples and stir to gently, but thoroughly coat them with the batter. Spoon the mixture into the prepared cake pan. Place the pan in the center of the oven and bake until fairly firm and golden, about 25 minutes.

To prepare the topping, take a small bowl and combine the sugar, egg, and melted butter. Remove the cake from the oven and pour the topping mixture over it. Return the cake to

the oven and bake until the top is a deep golden brown and the cake feels fairly firm – approximately 8-10 more minutes.

Transfer the cake pan to a rack and allow to cool for 10 minutes. Then run a knife around the sides of the pan, and release and remove the springform side, leaving the cake on the pan base. Serve at room temperature, cut into thin wedges. Serve with whipped cream or scoops of vanilla ice cream.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title: Higgins Bend Song and Dance
Author: Jacqueline B. Martin
Illustrator: Brad Sneed
Copyright: 1997
Summary: This is a fish story—the *whopper* kind!

Social Studies: Geological Term - Bend or Meander

The title *Higgins Bend Song and Dance*, has a word in it you could discuss with your student. What is meant by the word *bend*? Your student probably knows what a bend (or a curve) in the road is like—but what is the bend in this story? In *Higgins Bend* it is a bend in a river! If your student has ever flown over rivers in an airplane he knows that most rivers are twisting and winding and have many curves in their paths. If your student has not seen rivers from the air, try finding a high bluff or building where a river's course can be viewed (hopefully a river with at least one bend that can be seen). You can also simply look at a map to see the many bends in a river's path.

Why do rivers have bends in them? How do they get that way? Most of the time a bend in a river's course is due to the force of the water against the bank that wears away the sediment, creating a scooped out area or bend. The water hitting the bank is pushed back toward the other bank and creates a bend on the other side. As the force of the water continues to hit the curves it makes them even larger. This is a very simple explanation, but it explains why a river has bends in it and how rivers, over time, move in their course.

[A more technical **geological term** for bend is "**meander**." You could discuss this term with your older student at the end of this lesson, tying it in with the idea of bends or curves in the river banks This discussion might lead to other ways we use the word meander—for instance, to wander off of, or away from, a path, etc.]

Social Studies: Character Relationships - Rejecting Community

Jacqueline Briggs Martin creates a complex character in Simon Henry. We know that he does not like to join in with others to sing or dance or hear stories, but we don't

really know why. Potato Kelly says "too much work and tight boots have pinched her friend inside and out." But as with all people there is probably more to his story than that—perhaps some hurt, we just don't know. Simon Henry is what people call a loner and according to the story, "...all business—fish business." All he did was work and fish and that made him really happy. Look at the illustration opposite the first page of the story. Does your student think that Simon Henry looks happy? He even has a butterfly on his hat but does he notice or care? The story says, he never laughs and he doesn't even smile one day out of seven!

Discuss with your student the life of a loner. Yes, it is true without a lot of others around you can pick exactly what you want to do when you want to do it. No one will be telling you what to do. But what is the result of such isolated living? Was Simon Henry helping others? Was he allowing others to help him or even to have fun with him? Does it look like Simon Henry has made a good choice by rejecting all the community functions and relationships?

Continue talking with your student about the concept of desiring to live life with others—in a family, with friends, in a marriage. Living with others around isn't always easy. You do have to share, and compromise now and then doing things that other people want to do. Also, people don't always treat one another with consideration. Sometimes they tease or say or do something hurtful. However, in the long run, having people around you to share stories, hard times, and triumphs is essential to human nature.

Remember *The Rag Coat* by Lauren Mills? Minna, the main character in the story, comes to believe for herself an important truth that was taught to her by her father: "People need people." (Lessons for *The Rag Coat* by Lauren Mills are found in *Five in a Row* Volume 1.)

Perhaps Potato Kelly's loving, patiently offered friendship has something to do with it, and maybe a traumatic encounter with a fish—but Simon Henry does change. Follow his expressions from the dust jacket cover through the story until he tangles with Oscar and then watch the change. This is a good example of how the illustrator is faithful to the author's story and you get a good look at the new Simon Henry—a man who is now willing to be with people.

Social Studies: Business

Potato Kelly had a business. It was a bait shop and restaurant. It was also a meeting place—a place where people congregated and swapped stories and became friends.

Simon Henry had a business too. It was the business of fishing!

If you have previously studied *The Night of the Moonjellies* in *Five in a Row* Volume 1, you could continue talking about the topic of family businesses and comparing Potato Kelly's Bait and Chowder shop. Discuss similarities and differences. (The setting for one restaurant is the ocean while the other is a river bend. In *The Night of the Moonjellies* the restaurant is just for food, where Potato Kelly's is a store of fishing supplies and bait as well as a place to get something to eat. The food itself is different. Families patronize both places. We see lots of help in one restaurant while it looks as if

Potato Kelly runs her place alone. From the pictures and text we can't really tell. The Moonjelly restaurant is an open-air-stand type building (dining outside) while Potato Kelly's has an inside building with some outside dining, etc.)

What skills would be helpful in running a successful business? (Keeping an inventory system, having a servant's heart and good relational people skills, finding out what people like and need, keeping a clean and neat store would all be helpful. In addition a food service store would have to be very careful about germs, etc.)

Another fantastic book about small business to read at this time is *Once Upon a Company* by Wendy Anderson Halperin. This is a true story of a family of children who develop their own company, learning along the way all about how a company works and grows. The money made by these children goes into their college fund. A truly remarkable book!

Language Arts: Tall Tales

If you need information on the subject of a tall tale see the lesson entitled Language Arts: Tall Tales found in FIAR Volume 4 in lessons from *The Gullywasher*.

Now, create a tall tale of your own. You can brainstorm together with your student or have him try by himself, if he'd rather. He could make a tall tale about how something was created, or like *Higgins Bend Song and Dance* about a particular incident blown out of proportion. A tall tale could be about himself, a member of his own family, a pet, or just about anything else he can think of! Your student might think about making it into a book with illustrations. Enjoy!

Language Arts: Supplemental Story with a Similar Theme

Joan Blos writes a story of a man who doesn't seem to fit into his neighborhood. The book *Old Henry* has an interesting similar theme with a surprise ending.

Art: Medium and Style

Brad Sneed illustrates *Higgins Bend Song and Dance* with beautiful **watercolor** illustrations of the river, its residents (like Oscar) and the people who live along its banks. Spend a few moments with you student looking at the illustration on the title page. Can your student see the fisherman? Let him examine the way the trees and leaves are painted, and the reflections of the trees in the water. Then gaze at the broad expanse of river to the bottom of the page. This picture is a preview of a "watery" story to come! Now, look at the last picture with the soft, brown dirt bank and its reflection in the water and the river as it flows around the bend. Have your student point out other illustrations in this story that are his favorites.

Sneed has an unusual artistic style of exaggeration in his paintings. The characters are elongated in a sort of caricature (exaggerated figures) effect. Try to find a book at your library with some paintings done by the Missouri artist Thomas Hart Benton. You and your student will be able to see similarities in these two artists' painting styles. Preview the books you may find in the adult section of the library, since you may not feel *every* picture is appropriate for your student's age, but there will be many that you can show him—wonderful paintings that will allow him to view the similarities in these two artists' styles.

Also in *Five in a Row* Volume 4, there are lesson plans for a story called *The Pumpkin Runner*. Brad Sneed did the illustrations for that story as well. Whichever story you study first, be sure to mention to your student when doing the second story (if he doesn't mention it to you first!) that these illustrations are similar to another book you've studied.

Art: A Cross Section Image and An Underwater View

For those of you who have the dust jacket on your book, look at the front picture. Have your student study the picture for a few minutes and then ask him to tell you about it. The unusual thing about this picture is that you can see the fish and the bobber and the fisherman's legs as if you had sliced down through the water! There are not any other pictures exactly like this one anywhere else in the story. This type of illustration is called a cross-section. Your student will hear the term cross-section in many applications from art, to architecture to science (the "cross-section of a leaf" slide for instance). Cross-section images are often used in books that explain how things are built and how they work. Stephen Biesty has several books that have cut-away or cross-section views of castles, ships, etc. You can find these at your library.

There is however, another unusual view painted by Brad Sneed, and that is the view from below Oscar as he is looking up at Simon Henry's raft. Now *there* is a picture! If this was the only scene your student could look at as he listened to the story, who does he think would win this fishing contest—the fish or the fisherman? Why? (No particular correct answer here, but your student might say the fish because the fish certainly *looks* bigger than the fisherman!)

Maybe your student would enjoy planning and executing a drawing or painting of something in cross section or something from another unusual view point.

Art: Potato Stamping

Potato Kelly was Simon Henry's friend and she was famous for all sorts of wonderful chowders and dishes which she made from potatoes. In honor of Potato Kelly and her friendly, cheerful disposition, show your student how to make carved potato stamps. You might even try one with a fish, one with waves, one on a boat, etc.

Make designs on the cut halves of potatoes. Remember carving is cutting away all that isn't the boat or fish, etc. To make a stamp just cut down about a quarter inch, so the figure which remains is raised enough to make a good stamp.

Using fabric paint for cloth, or tempera or dark watercolor paints for paper, make stamped designs. You can decorate the edges of the paper and use them for centerpieces or stationery. Fabric rectangles can also be hemmed for placemats to be stamped, or t-shirts can be decorated with potato stamp designs.

Math: Store Keeping Skills

Potato Kelly runs a store. She has a cash register. If you haven't already covered this topic teach about money denominations, or making change or for older students figuring discounts or taxes now is a great time. You might want to discuss how to set up a simple inventory system for a small store and how today, many large stores manage this facet of business through computerized systems.

Math: Numbers Surrounding the Topic of Rivers and Their Water

It might be fun for your student to learn how much water weighs. A cubic foot (remember that cubic measurements are measurements of **volume**) of water weighs approximately 60 pounds. That means that if you had a box measuring **one cubic foot** and filled it with **water**, that volume of water would weigh a little over 60 pounds (**62.4 lbs.**) Water is heavy! Your student will know that if he has had to carry buckets of water to a garden, pool or fountain.

Each river has its own length, width, and depth. All of these can be measured. Your student can look up the measurements of famous rivers' lengths and compare them. What river is the longest in the world? (While the Nile River, in Egypt is the *longest* river in the world, the second longest river, the Amazon empties an impressive 4.2 million cubic feet of water into the ocean every second, much more than the Nile! Did your student remember that the Yangtse River is the third longest river in the world?) Your student may like to make a chart of rivers of the United States or rivers of the world showing their statistics.

How many feet deep is a river? Each river has it's own depth, some are very shallow, just a few feet deep while larger bodies of water such as Lake Superior are over a thousand feet deep. In the days of the steamboat, rivers were measured or "sounded" by dropping a line or rope into the water and measuring the depth. A famous American author named Samuel Clemens used the pseudonym (pen name) Mark Twain for his writings. The term **mark twain** was a measurement desired by riverboat captains to *safely* navigate the rivers. If the person measuring the depth called out mark twain it meant that the riverboat was in 2 fathoms (a nautical unit of measurement, each fathom equals 6 feet) of water. Twelve feet was the least amount of depth at which a riverboat could safely pass without running a ground. A riverboat captain needed to know his river, the bends, the sandbars, and the depths at various places along the way.

Science: Physics - Raft and Buoyancy

A raft can be made of boards, logs, pieces of Styrofoam, rubber, or of materials which are air-filled. When a raft is placed in a river or pond, the weight or density of the water holds it up and allows it to float as long as the raft has less total density than the water in which it is floating.

(**Teacher's Note:** Did your student notice the bobber on the front cover of the dust jacket of *Higgins Bend*? It is floating. Another example of buoyancy! Once your student understands a concept he may see many examples of it around him.)

The scientist Archimedes is considered the person responsible for defining the principles of buoyancy. The following web site has information and graphics for you, the teacher, about Archimedes and the subject of buoyancy. You can decide how much of this information would be interesting and helpful to your student's understanding of this scientific principle:

http://www.engineering.usu.edu/jrestate/workshop/buoyancy.htm

And, for more information about rafts and some ideas to make a raft of your own, see the lesson taken from *The Raft*, entitled Art: Building a Raft, found in FIAR Vol. 4.

Just thinking about a raft reminds us of the story *Tom Sawyer* by Mark Twain and Tom's exploits with Huck and their river adventures. If you enjoy Twain's writings, find a copy and read just the raft portions or finish it if your student loves this story, as a read aloud.

Science: Fish and Fishing

Let's learn about the fish's place in the animal kingdom (review the kingdoms when you teach a new one or keep a running chart and keep adding to it! For a teacher who is able to keep charts (either on a chart rack or in a large flat box), simply adding information to an existing chart is such a practical way to review past lessons with your student. It just takes a moment to review previously learned facts before you add new information to the existing chart.

Did you know that catfish are named because they have what appear to be two to four pairs of whiskers—reminiscent of cats! These whiskers are, in fact, actually called barbels. Catfish come in many sizes ranging from a few inches to over ten feet and are found all over the world in both salt and fresh water. The kind of catfish that Simon Henry wanted to capture was probably a channel cat. These catfish live in the rivers of North America. There are also catfish that live in lakes and ponds. Record fish are caught at thirty-plus pounds in the United States.

Many people consider catfish to be so delicious that catfish farms are operated in several states. These "farms" raise fish specifically for human food consumption. The farm-raised fish are popular for being sweeter and less fishy tasting than the river cats.

Higgins Bend Song and Dance offers a chance to have a discussion about fishing. If there is an avid fisherman in the family, or in the neighborhood, this would be a great opportunity to have him share this subject that he (or she) knows and loves, with your student.

Some topics to choose for discussion could be, types of fishing poles and rods, types of reels, different kinds of bait—as Simon Henry found out! Baits can be live (such as minnows, worms, etc.), and there are also artificial baits and lures of many descriptions. Just for fun, visit a bait and tackle shop or the fishing department of a mart-type store and examine the myriad of bait and lures used for fishing.

Discussion topics for this subject might also include different species of fish in your area, and how to fish a stream, river, pond, etc. If you are not expert in this sport find information at your local conservation department. At your conservation department you will probably be able to collect pamphlets about fishing. These pamphlets include information on fishing regulations, and the types of fish in your area—where to find them (in ponds, rivers or lakes, and whether they live in shallow, medium or deep areas) as well as what is currently used in each case for bait.

Science: Biology – Flies, Worms and Butterflies

Simon Henry is all fishing business and as you and your student look at the picture opposite the first page of text, you can see Simon's bait bag hanging at his waist. There are some flies buzzing around it and some worms peeking out, as well as butterflies on Simon Henry's hat. (And yes, there is a dragonfly on the river plants, below.)

In the lessons for *Snowflake Bentley* there are a lot of study topics for butterflies in the lesson titled Science: Butterflies. However, just as a reminder, butterflies are members of the Phylum Arthropods in the Class Insecta and of the Order Lepidoptera.

Flies, those insects with the large compound eyes and two wings, are classified in the Order Diptera. An excellent study sheet on the common house fly can be found at:

http://www.enchantedlearning.com/subjects/insects/fly/Houseflyprintout.shtml

Both the butterfly and the common house fly also have **jointed legs** so they are both members of the **Phylum Arthropoda**, and they both are of the **Class Insecta** because they have **three body parts, antenna, and six legs** even though the fly will be in a different Order (Diptera) than the butterfly (Lepidoptera).

Your student may enjoy beginning a simple insect collection with some of the common insects, labeling them with their classification names and defining characteristics. It is critical, no matter what type of display case you use for an insect collection to put in a moth ball or two or a piece of insect pest strip to prevent weevils from destroying the collection. These preventatives will have to be replaced periodically, every eight months or so. Because both moth balls and pest strips are poisonous care must be taken when using them and with where the collection is stored–not in small children's reach.

Common Orders of the Class Insecta

Lepidoptera (scale wings) Butterflies Skippers Moths	**Diptera** (two wings) house flies mosquitoes	**Hymenoptera** (membrane wings) ants, bees, wasps	**Coleoptera** (sheath wings) beetles
Homoptera (same wings) cicada	**Hemiptera** (half wings) bugs, i.e., cinch	**Onodata** (toothed) dragonfly	**Orthoptera** (straight wings) crickets, grasshoppers

These are just a few of the common orders of the Insecta Class. (There are 26 orders altogether.) This lesson is for those who are *interested* in learning about and categorizing insects. Your student may not yet be ready to find the enjoyment in such a project. If not, it is fine to wait till upper grades to do this sort of exercise. However, if you, yourself are interested, you can, make up a sectioned box of specimens and label them for your classroom use. Whenever you find a new insect, like a silverfish, for example, add for it a new section: the **Order Thysanura** . Yell out loud and strong that you, "Found a new one!" and your student will at least be amused if not intrigued by your interest. Your collection will grow and review will be fun. Being able to see insects at close range, examining the legs, eyes, wings, etc., is an important part of learning about nature.

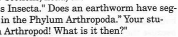
The worms that Simon uses for bait are probably night crawlers, also called an earthworm. (A few other types of worms are used for bait, but the earthworm is certainly the most common.) An earthworm is in the Phylum Annelida.

(**Teacher's Note:** The following guided questions are to help your student learn how the classification system works and how he, himself can tell which creatures fit into which categories, by observing and thinking through a creature's defining characteristics.

Phylum: Annelida - Segmented Worms

"Does a worm have three, segmented body sections, head, thorax and abdomen *and* have six legs? (No) Then it is *not* in the Class Insecta." Does an earthworm have segmented legs? (No) Then it could *not* be classified in the Phylum Arthropoda." Your student may say, "It's not an insect—it's not even an Arthropod! What is it then?"

Your student will need to look for a new category in which to fit the earthworm. You can lead him to the discovery of the large Phylum **Annelida** (uh NEL ih duh) or segmented worms! (There are four groups of worms but the one group of segmented worms is more than enough information for now.)



(**Teacher's Note**: A reminder to you to help your student: Grubs and caterpillars are not worms, but rather the larval or juvenile stages of certain insects such as beetles

or butterflies, etc. Later in life, the former grubs or caterpillars do not resemble a worm, but rather creatures with the characteristics of true insects, legs, wings, etc.)

The earthworm, Lumbricus terrestris, is a scavenger, feeding on decaying plant material. A look into an encyclopedia will supply your student with some great fun facts about this creature, including five pairs of hearts, and no lungs or gills! Simon Henry sure had interesting things in his bait bag!

Science: River Life

Flora: Rushes are grass-like plants that grow in damp areas. Yet, not every grass like plant that grows in damp areas is a member of the family of rushes! Let your student ponder that idea for a moment. (Learning to differentiate one species from another in the world of nature is important. Each time your student carefully observes something in nature, he will continue to learn more about it and see how it fits into its very own proper niche in the plant or animal kingdom.)

Watery areas have many different kinds of plants, grasses, cattails and other weedy growth. If you have a pond, river or lake area nearby, you might enjoy exploring and seeing how many different kinds of plants you can find near the water, or at the water's edge. Do wear proper clothing and boots for your explorations, especially if there are snakes in your vicinity. Let your child explore, discover, draw and write about what he sees. He can add this work to his science notebook or to his nature journal if he is keeping one.

Fauna: Red winged blackbirds, herons, loons, otters, peepers (frogs), dragonflies, worms, and bees are a few of the fauna listed or illustrated in *Higgins Bend Song and Dance*. Of this list, how many has your student actually seen himself? Where did he see them? Using an encyclopedia and a good bird guide, try to find examples of these birds, animals and insects and learn some new facts about them. Have your student record these facts in his science notebook. For students who enjoy drawing, they may wish to make up a composite picture of many of these river plants and animals that might have been seen from Higgins' bend in the river!

(**Teacher's Note:** If you have previously done the lessons for *The Raft*, have your student add the animals and insects to his list for the science lesson there. If enjoys doing so, have him place these animals and insects under their proper classification categories. This time there will be actually be an amphibian [a frog] for the list! Also, can your student find the kingfisher, a bird that is found close to water? He may have studied this bird when reading *Henry the Castaway* by Mark Taylor. The lessons for this book are found in *Five in a Row,* Volume 3.)

Science: Astronomy - Morning Star

When Potato Kelley and Simon Henry set off on the raft under the morning star, little did they know Oscar would pull them all the way down to Higgin's Bend!

Has your student ever noticed a very bright looking object in the sky near the horizon just before sunrise or just at after sunset? There's a good chance he has seen the planet Venus. The term *morning star* usually refers to this planet (seen early morning) which is the brightest celestial object in the sky after the sun and moon. (The planet Mercury also can be seen in a similar fashion, at certain times of the year but it is not nearly as bright and noticeable as the planet Venus. The planet Venus was viewed for thousands of years before there was a telescope to help its viewers understand that it is a planet and not a star. Thus generally Venus is still known as the "morning star" even though it is not a star at all and it's amazing that your student can see this same "morning star" for himself.

Common Orders of the Insecta Phylum

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Common Orders of the Insecta Phylum

Lepidoptera 	Diptera 	Hymenoptera 
Coleoptera 	Homoptera 	Hemiptera 
Onodata 	Orthopera 	_____
_____	_____	_____

Bible Lessons

Proverbs 16:18

The Scripture says that **pride** comes before a fall (Proverbs 16:18). How does your student think that the story of Simon Henry and his fishing exploits fits this verse? Simon Henry was so sure he could catch the old wily fish. He puffed out his chest and pulled on his suspenders and boasting over and over that **he** could do it. When the climax of the story arrives and the fish gets away Simon Henry is set up for his fall! Everyone knew that he hadn't been able to catch the fish. And then, too, 1 John 2:16 says that the boastful pride of life is not from the Father. (There is an interesting story about a King called Nebuchadnezzar found in Daniel 4:28-36, but verse 37 is the testimony verse of a man that has known great pride and has at last understood that God can humble him. Nebuchadnezzar praises and honors God that He is able to humble the proud.)

1 John 2:16

Daniel 4:28-36 & 37

1 Peter 5:5-6

1 Peter 5:5-6 says that God gives grace to the humble. Perhaps Simon Henry could have been more humble in the way he spoke of what he could do. Words like, "I'm going to try my best," would have more **humility** than "I can do it, watch me!"

Why does your student think that the Lord asks his people to be humble? (Because that is what *He* is like. Remember Jesus humbling Himself to wash the disciples feet or riding into town on a lowly donkey? In the same way, when He asks his people to walk in humility, He is asking them to be like Him and do what He does.) What is it that the Lord says he will give to those who are humble? (His grace!) What is a wonderful reason to be humble? You get grace—amazing grace! Grace to help in time of need!

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Deuteronomy 23:23

Matthew 5:33-37

Remember that Simon Henry vows if he can't catch the water burglar he will sing with a bull frog, dance with his fish pole and eat his socks. In the Old Testament the people were told to keep their vows. (Numbers 32:2, Deuteronomy 23:23) In the New Testament Jesus says, we don't need to make vows (Matthew 5:33-37). This is because it might be presumptuous to declare what he will and will not do for we don't know what each day will bring and all things are accomplished only with the Lord's help anyway. Perhaps Simon Henry should not have been so rash as to make a vow, but he does follow through with his word with a joyful spirit.

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In the science lessons for Higgin's Bend it talks about the **morning star** which is actually the planet Venus. Here are two references to morning star(s) from the Bible. Job 38:7 and Revelation 22:16b. In the verse from Revelation, Jesus calls Himself the bright and morning star.

Job 38:7
Revelation 22:16b

****

When your student studies the science lessons for river, plant and animal life he will read about rushes that grow in and near the water. Remind him of the story of **Moses** and the **bull rushes** found in Exodus 2:1-10. Let him think about how the plants might have looked and how they hid the basket for awhile.

Exodus 2:1-10

Simon Henry is pinched and mean and mostly stays away from people. After the big one gets away with part of his sock, he changes and your student can begin to see this character smile and laugh. The Bible says that while a **broken spirit** dries up the bones, that a **cheerful heart** is good medicine. Proverbs 17:22 With this verse in mind and Simon's newfound cheerful disposition, Simon certainly does seem to be getting better!

Proverbs 17:22

The Bible talks about a friend that sticks closer than a brother. (Proverbs 18:24b) and a friend that loves at all times (Proverbs 17:17a). It seems as if Potato Kelley fits these descriptions perfectly. Review the story with your student—watching for the kind, friendly, patient way that Potato Kelley interacts with Simon Henry. Even though he is hard to get along with, and it would seem so easy to just dismiss him and forget about him, Kelley stays cheerful and friendly and never seems to lose hope that he might change. Look at the last page to see the rewards that Potato Kelley is reaping.

Proverbs 18:24b
Proverbs 17:17a

RECIPES FOR A HAPPY, HUMBLED FISHERMAN AND HIS FRIENDS

Down home gatherings of good old friends bring to mind special foods like the Potato Chowder, Mashed Potato Pancakes, Fried Catfish and Cold Lemon Pie which simply call out for a summer party. Serve along with some cole-slaw and you have a meal to remember. After enjoying your dinner, you might want to sit back and sing a few stanzas of "Old Man River"!

_____ Mashed-Potato Pancakes

2 cups mashed potatoes (these can be left-overs)
1 large egg, beaten lightly
6 tablespoons all-purpose flour
11/2 tablespoons grated onion
Salt and pepper
Vegetable oil, for frying

Preheat oven to 250 degrees F.
In a bowl combine well the potatoes and the egg, stir in the flour thoroughly, and stir in the onion, and salt and pepper to taste. In a large heavy skillet, heat 1/8-inch of the oil over moderately high heat until it is hot but not smoking. Fry heaping tablespoons of the potato mixture, flattening them slightly with the back of the spoon, for 1 minute on each side, or until they are golden brown. Transfer the pancakes as they are cooked to paper towels to drain and if desired, keep them warm on a rack set on a baking sheet in a preheated 250 degree F oven. Serve the potato pancakes as a side dish, or as simple lunch or supper. They would even make a great camping breakfast on a fishing trip for that big one!

_____ Potato Chowder

6 medium potatoes
2 medium onions
2 cups chicken stock (can use canned)
4 cups milk
2 Tablespoons butter
Parsley
Salt and pepper

Peel and dice the potatoes and dice the onions. Melt the butter and gently cook the onions and potatoes in a covered saucepan until soft but not colored. Add the liquid; adjust the seasoning to taste. Continue cooking until a few test potato pieces are soft enough to mash against the side of the pan with the back of a spoon. Serve with parsley, salt and pepper. Simple and perfect.

Fried Catfish

If you cannot bring yourself to try frying catfish at home, there are restaurants that specialize in this tasty dinner. Visit one and at least sample! But if you are brave, this dish is simple to prepare at home and equally delicious!

3/4 cup yellow cornmeal
1/4 cup all-purpose flour
2 teaspoons salt
1 teaspoon ground red pepper
1/4 teaspoon garlic powder
6 (6 ounce) fillets farm-raised catfish (available fresh or frozen at grocery stores)
1/4 teaspoon salt
Vegetable oil

COMBINE first 5 ingredients in a large shallow dish. Sprinkle fish with 1/4 teaspoon salt; dredge in cornmeal mixture, coating evenly. POUR oil to a depth of 1 1/2 inches into a deep cast-iron skillet; heat to 350 degrees. Fry fish, in batches, 5 to 6 minutes or until golden; drain on paper towels.

Frosty Lemon Icebox Pie

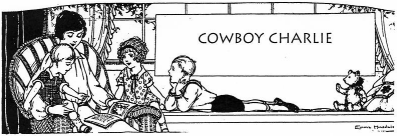
1 9-inch graham cracker pie shell (or 2 cups graham crackers, crushed, plus 1/4 c. melted butter, a tablespoon of sugar, and a 1/4 tsp. cinnamon mixed together and baked at 350 degrees F. till lightly browned)

1 cup sugar
3 tablespoons corn starch
1 cup water
1/3 cup fresh lemon juice
1 (3-ounce) package cream cheese
2 fresh eggs, separated
1/4 cup sugar
Cool Whip Topping (8 oz container)
Vanilla Wafer cookies

Combine 3/4 cup sugar, cornstarch, water, lemon juice and egg yolks in a saucepan, mixing well. Bring to a boil over medium heat, stirring constantly. Cook, stirring, for 1 minute after mixture boils. Remove saucepan from heat. Add cream cheese to lemon mixture, combining well.

With an electric mixer, beat egg whites until stiff; add remaining 1/4 cup sugar to the egg whites. Fold meringue mixture into lemon mixture. Spoon filling into graham cracker shell and refrigerate for at least 6 hours (or overnight). Top with Cool Whip topping and place the vanilla wafer cookies around the edge of the pie (sticking slightly down into the filling) to decorate. Serve immediately while the pie is still chilled.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.



Title:	Cowboy Charlie
Author:	Jeanette Winter
Illustrator:	Jeanette Winter
Copyright:	1995
Summary:	Colorful, exciting and filled with adventure, *Cowboy Charlie* is the true story of Charles Marion Russell, artist and sculptor of the American Old West.

Social Studies: Geography - St. Louis, Missouri and Helena, Montana

At the beginning of *Cowboy Charlie*, Jeanette Winter writes that Charlie left his home in St. Louis, Missouri, to go West. You may want to take this opportunity to study just a bit about the state of Missouri before you go on to the land that was to become the state of Montana.

The Internet or *The World Book Encyclopedia* will offer your student some information for finding five interesting facts to begin a study on Missouri and Montana. Help your student also find these states on a map, as well as their capitol cities.

St. Louis has a monument to Westward expansion called The Gateway Arch. It has become well know, nationwide as a symbol to Westward growth in the 1800's. It is also referred to as the Gateway to the West!

Missouri is also associated with Mark Twain and his stories of Tom Sawyer and Huck Finn, and also the artist Thomas Hart Benton. Missouri has a diversity of agriculture and livestock interests, as well as coal, lead and other mining, but because Missouri is centrally located many national firms have corporate offices in the large cities there. Service industries make up the major percentage of Missouri's livelihood.

Montana has vast areas of forest preserves and Indian Reservations. It has some farming, mining and industry, but in Montana there is always the tension of how much industry to encourage while trying to preserve the natural areas.

(Teacher's Note: For Canadian Rowers or other International Five in a Row users, this history lesson as well as the following lessons, can be taught in any depth you wish as you also teach lessons about your own country's exploration, expansion, settlement, etc.)

Social Studies: History - Statehood and Understanding History

Missouri entered the Union in 1821 while Montana did not join the Union until 1889. There is sixty-eight years difference in the entry date of these two states. Can your student think of a reason why Missouri might have become a state before Montana? (The answer to this question, requires an *understanding* of how the United States was explored, settled and then developed into specific states. The settlement of land moved westward with the earliest colonies on the coast becoming states in the late 1700's while the last continental states in the West (New Mexico and Arizona) entered the Union in 1912!

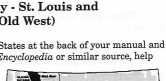
Therefore, there were states which made up the United States (remember the flag with thirteen stars?) long before the land in of Missouri was explored and settled. As Missouri became a state, the land of Montana and lands further west were just beginning to be pioneered. Settlement and statehood were still sixty-eight years in the future! *The World Book Encyclopedia* has some excellent overlay pages in the section called United States that show this westward expansion as states were being formed. Look at these sometime at your library if you don't have instant access to this resource.

Playing the popular computer game "The Oregon Trail," published by The Learning Company, is an enjoyable way to gain a better understanding of what it was like to move across the vast areas of the West during the 1840's and 50's. You can find this game at bookstores, computer software stores, and on on-line bookstores as well.

A really enjoyable family movie that shows something of the excitement of a territory which is about to enter statehood, is the Disney movie, *The One and Only Genuine Original Family Band*, which you can rent at most movie rental stores.

Social Studies: Geography - St. Louis and the Wild West (or Old West)

Using a photocopy of the map of the United States at the back of your manual and a map of the United States from your *World Book Encyclopedia* or similar source, help your student locate the city of St. Louis, Missouri. On his blank map he can place a dot for the city or draw an arch like the Gateway Arch Monument in St. Louis, or he could draw a picture of Charlie's home.



Then, help your student find Helena, Montana (you can also look for Red Rock on a travel map of Montana, if you wish). Place a dot there and label it with

the name of the city. Your student can even draw a picture of Cowboy Charlie there, if he wishes. Between St. Louis and Red Rock your student can drawn a train and train tracks, and between Red Rock and Helena, perhaps a stagecoach!

Have a discussion with your student about what geographical areas are meant when people refer to the Wild West (or the Old West). Ask him if he knows some of the land areas that are usually included. There are actually two portions of land referred to as the West. One is the land west of the Mississippi to the Rocky Mountains which encompasses the plains, and then the land west of the Rocky Mountains, which is sometimes referred to as the Far West, though both of these land areas together make up the term Wild West.

If you wish, shade these areas with different colors on your map.

(**Teachers Note:** Over a hundred years of history is spanned by the stories that Cowboy Charlie's father told him, the stories Charlie read for himself and the things that Cowboy Charlie saw in his own lifetime! That is why the history lessons for this book's study are so numerous. Just pick a lesson topic or two to introduce to your student and then come back to the other story lessons later for fun.)

Social Studies: The Wild West

Cowboy Charlie begins with words that Charlie was born "when buffalo still roamed the west." However, by the time Charlie traveled west at fifteen, a great number of the buffalo were gone. The intrusion of the railroads across the plains had brought an end to the giant herds that so freely roamed the land. Charlie, certainly saw some buffalo, but not in the numbers that were in the West at the time he was born.

With your student, review pages 9 and 10 of *Cowboy Charlie* and have your student make a list of all the things Charlie saw:

Mule skinners (Muleskinners were men who handled mule teams which were harnessed together to pull freight wagons. The muleskinner used a single line, called a jerk line, to guide the teams. Good mules were valuable and some of the best came from Missouri. The very state from which Charlie had come!)

Miners (Men who worked to get silver, gold, bauxite, and other minerals from the ground.)

Mountain men (Men who were hunters, trappers and explorers like Jedediah Smith and Jim Bridger. These men were often hired by large fur companies to obtain pelts and hides.)

Indians (Begin to do some study on basic tribes and Indian nations and the areas of the country where each made their home.)

Bull teams --Freight outfits

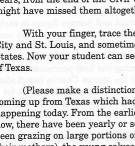
Saddle horses (Horses that were trained to be ridden by man.)

Pack horses (Horses that were trained to carry a load.)

Covered Wagons (The familiar Conestoga wagons were covered wagons that traveled across the west. Built something like a boat, with the front and back swooped up higher than the middle, the wheels could be removed and the wagon floated across rivers.)

Talk about any items on the list with which your student is unfamiliar. Have him keep this list and add to it as Charlie sees more and more amazing things. Your student can list the animals he sees in the story, as well other details such as chuck wagons, campfires, scenes of bronco busting, calf roping and branding; teepees, Indian pipes, and lariats. The wooly chaps are interesting as well. Leather chaps protected the range riders against thorns and brush but the wooly chaps were also protection from the cold and were used only in the northern plains and mountain states like Montana!

Social Studies: History - Famous Cattle Drives "Up from Texas"



Discuss with your student that cowboy Charlie is enamored with all he hears and reads about the Old West. Remind your student that many of the stories Charlie hears are about people and events that happened in the years before he was born.

Yet, the famous cattle drives from Texas to Missouri and even into Montana were in their heyday during Charlie's life and he was able to participate in them and fulfill his dream. These famous cattle drives only spanned about twenty years, from the end of the Civil War to the 1880's. If Charlie had been born any later he might have missed them altogether!

With your finger, trace the route the cattle followed north from Texas to Kansas City and St. Louis, and sometimes on north even into Montana on a map of the United States. Now your student can see that the term "up from Texas," means moving north out of Texas.

(Please make a distinction for your student between the famous large cattle drives coming up from Texas which had a short time span, and the term "roundup" which is still happening today. From the earliest times of cattle ranching in the United States until now, there have been yearly or seasonal roundups. This is the time when cattle that have been grazing on large portions of land are rounded up, nursing calves cut (separated from their mothers), the young calves branded, some cattle sold and shipped or driven to a shipping point, etc. During these roundup times you can still see cowhands, bronco busters and chuck wagon cooks! To help with the understanding of the skills necessary to be a cowhand, you can perhaps find a modern day rodeo to visit or see one on T.V.)

Social Studies: History - Explorers, Pioneers and Settlers

The story *Cowboy Charlie* provides an opportunity to study how the areas west of the Mississippi were explored, pioneered and finally settled.

Explorers, Trappers and Mountain Men

Explorers of the Mississippi River included men like Jacques Marquette and Louis Joliet, while Daniel Boone, Kit Carson, Jim Bridger and others explored and trapped through the plains and Rocky Mountains. Eventually in 1804 Lewis and Clark mapped a route from near St. Louis to the mouth of the Columbia River as it emptied into the Pacific Ocean, in what is now the state of Oregon. (This is not a complete set of names of the explorers but more than enough for introductions to the topic for your student's age group.) If you can find some interesting simple books on any of these men, it would be fun for your student to read them in their free reading time.)

Remind your student that Cowboy Charlie had a Great-uncle Bent* who was a fur trader in the Old West! The life of a fur trapper usually consisted of trapping during the fall and spring while over-wintering in a quickly built small log cabin in the remote woods areas between hunting seasons when streams and ponds were frozen. Then in the late spring the trappers would transport the furs acquired in one or more trapping seasons to Forts or other pick-up points where the trapper was finally paid for his furs. Uncle Bent, as a fur trader, was the man who dealt with these various trappers, judged the quality of their furs, and bought furs from the trappers for various commercial clients and large fur companies.

*Charlie's Great-uncle Bent was actually an important and famous figure in early Colorado history. Born in St. Louis, he became a fur trader in the West, was friendly and fair with the Indians, and built Fort Bent (a massive adobe structure-you can find a picture of it on the Internet). This trading post was the largest post west of St. Louis. Bent was even responsible for gathering some settlers and forming the first permanent colony in what is now the state of Colorado. Such inspiration (all the stories Charlie heard about this great-uncle) was instrumental in creating in Russell a love of the West, a heart for the Native Americans, and a desire to preserve all he saw by his paintings and sculptures!

Pioneers - Cabins, Sod, and Adobe Homes

(Teacher's Note: A good reference book for the discussion on Pioneers is *A Pioneer Sampler* by Barbara Greenwood.)

In *Cowboy Charlie*, Charlie Russell meets a goodhearted hunter and trapper named Jake Hoover. Jake lives in a small log cabin. In the West, when a home or shelter was needed, people used materials that were nearby for construction. Transportation of

distant materials would have been too costly or just impossible. So, where there were forests log cabins appeared!

On the prairies of the West, trees were often scarce or absent all together. In this case determined pioneers dug pieces of sod out of the prairie and made what is known as sod houses.

In the hot desert areas of the West, adobe homes (constructed of brick made of clay and straw, baked by the sun) were built. These homes with thick walls and small windows helped keep their occupants cooler in the warm times and warmer when it was cold. Like the timber or the sod of other areas, clay was what was readily available in these areas of the hot Southwest.

Besides refreshing your student's knowledge of log cabins, sod and adobe homes remind them again, that these various forms of housing came about because the people built with whatever materials were available for them to use. What else might a person building a house or shelter need to have near or available? Let your student think about this for a moment. (Water) Homes were built near creeks or rivers, or they had to dig wells, etc. (Truly remote cabins and sod homes also need to be near enough to a fort or town to get supplies at least every six months or so.)

Because pioneers were the first ones to build homes in a new area, they usually were far from neighbors. As the years went by more and more people arrived and created homes for themselves as an area became settled.

The settlers arrived. These people, who wanted to establish permanent homes closer to neighbors, purchased more closely adjoining land (still with land enough to raise crops) and began establishing towns with stores (rather than buying intermittently from the forts), as well as instituting town governments, schools, etc.

Social Studies: History Overview - Putting Russell in Historic Perspective

If you sense the timing is right, you can use *Cowboy Charlie* as an opportunity to do a quick overview of the early history of the United States. Just take a few minutes and discuss the list of events (highlight just the topics you think your student is ready for) leading up to the birth of Charles Marion Russell—Cowboy Charlie.

Jamestown settled on the Eastern shore of what is now Virginiain 1607.
Pilgrims began settlement at **Plymouth** in what is now Massachusetts in 1620.
The founding of other colonies followed.

French and Indian War 1763, during which French incited the Indians against the colonists and British. Britain defeated France in this war. (**Teacher's Note:** Just for your own information, this is the historic event that prompted James Fennimore Cooper to write **The Last of the Mohicans**.)

Anger is increasing in the American Colonies over arbitrary—not representative British rule.

Battles of Lexington and Concord (technically began the American Revolution) 1775

Declaration of Independence signed and sent to England1776

American Revolution 1776-1783

Constitution of United States ratified 1788

Bill of Rights added in 1791

Louisiana Purchase 1803 (land representing the watershed of the Mississippi bought from Napoleon, ruler of France)

1836 Remember the **Alamo!** (Seige by Santa Anna, Mexican General and place where Davy Crockett and all those at the Alamo were killed. It was this heroic incident that ignited many to rise up and fight against Santa Anna and defeat him.)

Texas Annexed in 1845

Oregon Country Cession 1846 (from Britain)

Mexican Cession 1848

Gold Rush in California 1848

The War Between the States 1860-1865

It was one year before the end of the Civil War that Charles Marion Russell (Cowboy Charlie) was born! Charlie was born more than 250 years *after* the founding of Jamestown, and 88 years *after* the signing of the Declaration of Independence, but *before* the end of the Civil War.

Social Studies: Native American Culture

In *Cowboy Charlie*, we read that Charlie not only meets Native American Indians but he lives with them and learns about their lives. The time he spends with the Blood Indians not only enriches his life, all he learns from them helps him greatly as he pursues his career in art. Charlie (as well as his Great-uncle Bent) has a respect for the people who were "there before."

The subject of Native American Culture is so broad that I suggest you find the best books from your library to follow the particular areas in which you are interested.

Some ideas for topical study are:

North American Indian Tribes and Nations

Lifestyle of the North American Indian Tribes

North American Indian Art

Famous American Indians. Here are a few.

Pocahontas
Sitting Bull
Sequoya
Geronimo
Crazy Horse
Massasoit
Tecumseh
Chief Joseph (ties in to Montana study)
Red Cloud (ties in to Montana study)
Sacajeweah (ties in to Montana study)

If you can, find the somewhat rare Hollings C. Holling books on *Cowboys*, and on the one called *Indians* at your library. Enjoy them with your student. Otherwise look for good simple books with photographs and drawings.

Social Studies: Travel

During the lifetime of Charlie Russell, people traveled across the west by various means. Many covered the distances by horseback, some in wagons, later by stagecoach and then by rail. There were even a few people who left ports on the East Coast of the United States and went by boat around the southern tip of South America and north to California. If your student would like, he could see how this type of travel by ship would work by looking at a map of North and South America and tracing the route with his finger.

Cowboy Charlie lived during the 1800's and into the early 1900's. During the 1800's rivers were the "streets" of trade and supply. Various types of boats (including steamboats) carried food and food products, building materials, furs from the fur traders, in fact most of the supplies you would find in a store of the time, to the towns along the river. From there these supplies were transported by wagon to towns further inland. Because the rivers were a major "street of commerce," cities were built on the banks of these large waterways. Indeed, the good river port played a role in deciding the location of many U. S. capitol cities. Many of the capitol buildings in the United States (which were built as each state joined the Union) were constructed right on the banks of a large river. Rivers also became easy boundaries between states and it would be interesting for your student to look at a map and see how many states have rivers as the main boundary separating them from the state beside, above or below them. Also see if how many capitols are located on a major river.

After railroads were built across the country, these rivers became less important as the main means of transporting goods and products. Eventually, the interstate highway systems used by the giant semi-trucks (technically named "tractor semi-trailers") became a major transport mover. Today rivers are still used for commercial trade, though rail and trucking companies generally carry a greater percentage of the goods, products and supplies within the heart of the country. During *Charlie's* life however, boats, trains and wagons were the transportation system for goods and products.

Social Studies: Methods of Communication in the West

As Cowboy Charlie heard, in the stories he was told, the land West of the Mississippi was rapidly opening up. People wanted to communicate with family, and especially business partners across the vast spaces of the prairies and mountains and on to the West coast.

An adventuresome enterprise was begun in St. Joseph, Missouri called the **Pony Express**. A man riding fast on horseback would take mail and travel a certain number of miles, switch horses or riders (at designated points called stations) and keep handing off the mail to other riders until one made it to the West coast. In this way the delivery of a letter could take less than two weeks, rather than the many months it took if an individual traveler carried the letter. The Pony Express has a colorful and exciting history and you can find out more about it through Internet research, encyclopedia or from a good, simple book from your library. The amazing thing about the Pony Express is that all the rides and letter deliveries took place in a span of less than two years! As soon as the telegraph lines were strung and messages could be sent across the country by wire, the Pony Express enterprise came to an end.

While the story *Cowboy Charlie* never mentions telegraph lines, this form of communication had its working span in Cowboy Charlie's time. The telegraph began, in the United States, through the efforts of **Samuel Morse**. He built the first working telegraph (in the U.S.) in the mid 1840's and developed the **Morse Code** for quick communication. Find a good simple book on the telegraph or on Samuel Morse and enjoy it with your student. A quick search on your favorite Internet search engine will help you find good information and history of the telegraph, as well.

Social Studies: The Old West Fades

(**Teacher's Note:** Since this lesson corresponds with the end of *Cowboy Charlie*, you might want to do the lesson about opening the west on Monday and this lesson on Thursday [along with the Applied Math lesson.] That way the history will follow the story.)

On the last page of text of *Cowboy Charlie*, Jeanette Winter writes Charlie's thoughts with a poignant sadness. Charlie could see that the Old West was fading and being replaced with a different kind of life style. Charlie was sad. He decided to live in a cabin and paint everything he could remember about the western way of life, cowboys, Indians, as well as the land and animals.

In some ways, it was the building of the railroad that marked the end of the Old West. Buffalo were gone and therefore Indian populations moved on, land was being fenced (no more free range cattle), towns were becoming cities, and civilization was closing in on the open prairies. And it was these changes that caused Charlie Russell to stay in his cabin studio and paint, for those generations who were to come, all he could remember of the wild western way of life.

His paintings were painstakingly accurate (one can identify specific Native American groups by the details of his work) and his sculpture caught the action and life of the world he saw fading around him. As Jeanette Winter has shown in her painting (the next to the last page) Russell finishes his days in his artist's studio (built to replicate Jake Hoover's cabin) and continues to wear his western dress including the red sash!

Language Arts: Biography

Charles Marion Russell born 1864 and died in 1926 at the age of sixty-two. Jeanette Winter writes about Charles Russell and tells many facts about his life. This kind of writing is called a biography. The word biography comes from two word parts—bio, meaning life and graph, meaning writing. Biographies are found in your library in a separate section where the books are arranged alphabetically by the name of the person of which each book is written. Therefore, you would look on your library shelf for a biography on Clara Barton, not under the author's name, but in the B's under Barton. If you find an author you enjoy who writes biographies on many different people, such as Robert Quackenbush, you need to use the card file or library computer system to look up the author Quackenbush and then write down all the books you are interested in. Take your list to the shelves and look for each one under the name of the person written about.

Because Cowboy Charlie is not a long book there are many things about Charlie's life that the author did not include. Suggest to your student that someday he may read other books about Charles Marion Russell which have even more facts about his life and work.

(**Teacher's Note:** There is another American artist who was born just a few years before Russell, named **Frederick Remington**. There are many interesting **parallels** between Russell's life and Remington's. It is amazing the wealth of information each of these men chronicled in their paintings and sculptures about a way of life of the Old West which was quickly disappearing. Depending on the age and interest of your student it may be too confusing at this point to try to introduce another artist. But, as the teacher, you may enjoy looking up Remington and learning a bit about his life and work for yourself. There is a great deal about both of these artists on the Internet.)

Language Arts: Story Telling

Find the Jeanette Winter's illustration of the men sitting around the campfire under the starlit night.

Looking at the picture, remind your student that Cowboy Charlie first learns about the Old West through stories his father reads and tells to him. Every new story makes

Charlie want to see the West for himself! Later Charlie hears stories and tales from the cowhands around the campfire in Montana and he even tells some stories of his own.

(**Teacher's Note:** Just a reminder for you of various descriptions of storytelling: spinning yarns, spinning tales, swapping stories, etc. There are some additional names for storytelling in the Author's Notes for *The Gulleyusasher* by Joyce Rossi.)

Discuss with your student the fact that storytelling is a wonderful craft or art form to attempt. Learning how to tell a good story has several facets. A good story always centers around a main incident.

To try a storytelling session with your student, have him begin with an incident that has made a real impression on him. Let him relate that incident to you verbally. (This could be something special that happened to your student or that he witnessed, or something that was scary like falling into a lake when he couldn't swim. It could be an incident from his own family history or something that he has seen.) If he would like you to do so, record his story on tape.

After he is finished, relate some incident from *your* life that greatly impressed you. Then give him a list of storytelling points* and see if he thinks your story has any area that could be improved according to these points, or embellished to make it a more interesting or exciting story. Remind him that critiquing someone else's work must be done respectively, just as he would want his own work reviewed.

When the exercise is over, if he asks, let your student work on improving his own story. If he does not ask, tell him that you are so glad he thought of an incident and told his very own story. At another time, you might work with him on additional aspects of personal storytelling. Again, this is such a valuable craft to pursue both for the future storyteller and his listeners!

List of Storytelling Pointers:

Remember a good story needs a beginning, middle and end. (So, a story of falling into the lake might begin with the description of a beautiful day and all the wonderful plans that have been made then progress to the accident, and end with the resolution of the event.)

The story teller should not try to memorize the story, but have the main points that he wants to cover in mind. (These important points are divided into the beginning, middle and end.)

He should think of interesting descriptive words, and paint with his words a picture of the incident, the feelings, the smells, sounds, etc.

He can use his voice to make the quiet parts of the story quiet and the exciting parts more lively. (In other words, he can use a good expressive voice as well as facial expressions and hand gestures.)

The story teller should keep some eye contact with his listeners. (In Jeanette Winter's story, the cowboys knew that Charlie's eyes were twinkling because they could see them!)

Family storytelling, as Charlie's father does when he tells his son stories of his great-uncle Bent, is a most precious memory-keeping device. Storytelling is an important tool to hold families together and keep them aware of their past and excited about their future. Encourage your student's family to work on incorporating family storytelling into their time together. Any family member can tell a story about another. An older sibling could tell the story of the first time the younger one walked, or smiled or fell off the bed. The children can tell stories about the parents or a visit by the grandparents. Parents and grandparents, as well as aunts and uncles can tell stories about the children. Yet, it must be remembered that these stories should always be told with respect, and by treating the subject of the story *exactly* as the storyteller would wish to be treated if a story were told about *him*. Family storytelling can be a chronicling of events and history and fun but should never be a painful experience for the subject of the story!

If you have an upcoming artist in the family, he may wish to illustrate the stories told in the family circle, just as Charlie listened to the stories and drew his heroes, and painted the stories that he heard!

Language Arts: Creativity and Imagination

(Teacher's Note: This lesson is just an enjoyable discussion that can take place anytime during the day.)

When Charlie Russell is young, he pretends that he sees bears in the woods, and imagines he is roping cows. With your student, discuss the fact that Charlie's imaginings are full of excitement and color and will influence his art in the years to come. Does your student see that same kind of creativity and imagination in anyone around him—either adult or young friend or relation? Does he, himself like to imagine? Do you? Share with each other the favorite things you've imagined and ways that your imagination has led to creativity.

To further your discussion, ask your student if he were walking through the woods, would he be more likely to imagine a scene from a jungle, the Old West, or a deserted island. If he were walking past a pond would he be more likely to imagine Captain Hook running from the crocodile, himself braving the ocean like Sir Francis Drake, or a happy fishing day with his dad. You can continue giving choices for imaginative play and discovering more about your student from his answers.

Language Arts: Describing the Jaunts of Imagination

(Teacher's Note: This lesson is similar to the one above, but it is written rather than oral. You certainly can do both lessons, but perhaps not on the same day!)

Discuss with your student the fact that when Charlie Russell was young, he had a desire to go West. He thought about it all the time. He imagined what it would be like to be there. He probably talked about it a great deal. His parents certainly were influenced

by his strong desire and let him take such a trip with a family friend. Seeing the West for himself was all that Charlie had imagined and even more!

Is there a place that excites your student's interest? It could be somewhere in his own country or abroad. Have him write a short piece about his special place as he imagines how it would be to visit, just like Charlie imagined it would be to go west. (Other topics for imaginings might be to think what it would have been like to go with Columbus on the New World voyages, to live during the time of legendary King Arthur, or in the reign of Queen Elizabeth? What would it have been like to be a pioneer in America? Has your student ever imagined being a part of the early explorations of Africa, or the Arctic? Would your student have enjoyed and dreamed of being in the airplane for the flight over the English Channel with Papa Bleriot or on one of the space missions?)

Language Arts: Poetry and Song

Below are a few suggestions for songs and poetry to go along with parts of *Cowboy Charlie*.

Sing the lyrics of "Home on the Range." Although they were written after the days of the Old West, speak of many of the things that Charles Russell saw. Also, check a cowboy songbook for songs that were sung around campfires and songs that tell the stories of the West.

One excellent resource book is out of print, but you may be able to order it through your library. It is called *Songs of the Wild West*, with Commentary by Alan Axelrod and Arrangements by Dan Fox. This book was a publication of the Metropolitan Museum of Art, so that beyond the music the book is filled with museum prints of famous western artists including Charles Marion Russell and Frederick Remington!

On the last page of *Cowboy Charlie* it says that the great herds of buffalo were gone. The poem "Buffalo Dusk" by Carl Sandburg, beautifully and poignantly describes this occurrence.

You may view this poem at the following URL.
http://www.bartleby.com/231/0905.html

There are also famous "cowboy poets" and you may be able to find some of their works with an Internet search. (Be *sure* to preview these!)

Here is a poem written by a Paiute American Indian and translated by Mary Austin. It tells of the Indian's desire, after a long winter, to see the summer months once again. The imagery of this poem is powerful.

The Grass On the Mountain

Oh, long long
The snow has possessed the mountains.

The deer have come down and the big-horn,
To feed on the mesquite pods and the bunch grass.
Loud are the thunderdrums
In the tents of the mountains.
Oh long long
Have we eaten the chia seeds
And dried deer's flesh of the summer killing.
We are wearied of our huts
And the smoky smell of our garments.

We are sick with desire of the sun
And the grass on the mountain.

Art: Painting

Find a collection depicting Charles Marion Russell's paintings. There are books of complete works at your library and Internet sites with art work displays. With your student, marvel at the rich variety of expression and first-hand knowledge of his subjects evident in Russell's detailed works. If you can, visit a museum that has an original Russell painting. There is no substitute for standing in front of the real thing—a picture where the artist's *own hand* made the brush strokes certainly brings a sense of reality to these lessons. So, if it is in any way possible, see an original piece of Charlie's art work!

Art: Panoramic Scenes

Based on the Greek words for "entire view" a panoramic scene is one that is wide and encompasses abundant scenery. In *Cowboy Charlie*, the fold-out scene of Charlie sitting on a horse overlooking the cattle crossing the river that stretches out over three book pages would be considered a panoramic view. Why does your student think that Jeanette Winter used this art form? (The broad vistas of the West could not be fully appreciated in short views, but filled the senses as far as eye could see. Jeanette Winter used this type of painting to illustrate the grandeur of the wide-open plains and mountains!)

Today some cameras have a setting that allows for extremely wide panoramic shots as well as regular sized pictures. In the past, some extra-wide movie screens were built with a curve that caused the movie to seem as if it happening around the viewer. Movies made for this type of screen were sometimes called Panovision. The more modern IMAX movies utilize some of these same techniques, as well.

Art: Painting and Color in Illustrations

Perhaps your student will remember Jeanette Winter's writings and art work in the *Five in a Row* Volume 2 Lessons for *Follow the Drinking Gourd?* . If you still have the book, look at the pictures along with those of *Cowboy Charlie.* You and your student will appreciate recognizing the same artistic style in both books.

Jeanette Winter painted the illustrations for *Cowboy Charlie* with acrylic paints. Remember, acrylic paints are much like oil paints but pictures painted with acrylics do not take as long to dry as oil paintings do, and the brushes can be cleaned with soap and water rather than turpentine.

Art: Sculpture - Modeling Figures

Cowboy Charlie modeled animals from left over pieces of beeswax. Your student can try that if he has wax available. If there is interest and no beeswax, let him model figures the way Charles Russell did in the story using clay, Sculpie®, or Crayola's Magic Model®. He can experiment with modeling animals, houses, people etc. Perhaps you and your student could create a Wild West panorama complete with painted scenery (Jeanette Winter style) and figurines. Don't forget to model a few cactus!

Art: Researched Details in Illustration

If your student already knew the personalities of Davy Crockett, Daniel Boone and Kit Carson and had seen portraits of these men in the past, he would be able to distinguish which man is which in the illustration at the top of page two of *Cowboy Charlie*.

Jeanette Winter did not just paint some random figures dressed in buckskins for these figures, but she actually did research to bring the likeness of each man to her illustration.

Your student might find it interesting to look up each man in *The World Book Encyclopedia*. Look at the portraits in the encyclopedia and *then* see if he can determine which figure is which.

The man on the left is Davy Crockett, the one in the middle is Daniel Boone and the one on the horse is Kit Carson! Don't they bear a strong resemblance to their portraits?

Art: Drawing on Different Surfaces

Most of the drawing your student has done in his lifetime was probably on paper. Charlie Russell painted on anything he could find. Paper would have been quite scarce in the days of the West, so Charlie was creative. He painted on boxes, birch bark, the backs of envelopes* and buckskin. It is entirely possible to find pieces of birch bark, or small pieces of buckskin for your student to try as a base for his drawing. What are other things around him that might be appropriate for use in drawing?

One thing is sure about Charlie—he drew. He drew all the time. He never stopped and though many times he probably was not satisfied with his work, he continued always trying to capture the things he saw around him. The fact that he never stopped trying is one of the marks of a true artist.

(***Teacher's Note:** Just for your own information: The use of the back of the envelope is reminiscent of Abraham Lincoln who, it is said, penned the Gettysburg Address on the back of an envelope as he was traveling.)

Art: Cooking

In the life of the West, during round-up (or cattle drive) time there was at least one man designated to cook the food for the cowhands who were working hard all day long. This man was called the cook, or commonly Cookie. He had a wagon fitted neatly with food supplies and cooking utensils. This wagon, known as the chuckwagon was a portable kitchen pulled by horses or mules, which could travel many miles from the home ranch and be right where the cowboys were actually working when mealtime came around. There are two pictures of a chuckwagon that Jeanette Winter has drawn. On the page where "Kid Russell" tells his stories in the starlight around the campfire, you can just see the corner of the chuck wagon. The next page has another view and you can tell how the back shelf drops down and is propped up by a single table leg. The cooking and washing up was done at the chuck wagon. Good cooks were highly sought after and chuck wagon cooks were paid more than the cowhands. The cowboys were respectful of the cook and even made sure they rode into meals from the downwind side so the food didn't get covered in the dust their horses kicked up!

Typical food from the chuck wagon included biscuits, meat (beef, deer or other fresh killed meat), beans, coffee, pancakes (called flapjacks), etc. Flour or cornmeal was used for flapjacks and biscuits, and sometimes a sourdough starter was used as well.

Math: Figuring the Years In Between Events

There are many dates of events listed in the history sections of these lessons. Find some different combinations and have your upper elementary grade level student do the subtraction necessary to see how many years transpired between specific events.

Math: It's in the Presentation

Charlie has his mind so full of the West that he doesn't apply himself to his schoolwork. Show your student the page where Charlie is drawing on his math problems. Perhaps he needs some interesting illustrations for his math book, or some problems he feels are relevant, like figuring how many mules it would take to drive a team and how many pounds of food and water they would need for a month long round-up.

Could your student, based on his knowledge of Charles Marion Russell (gleaned from this story) design a math curriculum that would excite Charlie's imagination and make him want to do his work? Let your student take a small segment of math work and try this idea. If your student were the teacher how would he try to present the material to Russell to attempt to capture his interest? How would he present the times tables or the subject of fractions?

Science: Astronomy – Falling Stars

Talk with your student about the idea that as a boy, Charlie lay outside his home in St. Louis and looked up into the sky wondering what it would be like to see the stars in the West. Then he was able to watch the skies many times as he rode nighthawk (guarding the cowhands horses at night) or was a night herder, singing lullabies to the cattle in the moonlight. Out in the Western dark without any lights, and in higher alti-

tudes (with its thin atmosphere) the stars appear more numerous and breathtakingly beautiful. Jeanette Winter paints beautiful night scenes and several times she depicts what we call a "falling star."

Show one of these illustrated scenes (including picture on front cover) to your student and ask him if he knows what a falling star is. Technically, a falling star is a meteor shooting through the earth's atmosphere and not a star at all! A meteor is a solid mass of material (from golf ball size to house size) which enters the Earth's atmosphere. The friction of the Earth's atmosphere causes the material of the meteor to heat up and glow. The meteor moves through the sky and sometimes burns up completely and sometimes [when not burning up completely] actually strikes the ground. People commonly call these meteors falling stars or shooting stars but they are meteors that look sort of like a star moving rapidly across the sky.

Maybe your student has seen a shooting star or maybe he would like to begin watching for one. During certain times of the year, meteor showers are more common and there is a greater chance of seeing shooting stars. You can determine when these peak viewing dates are by looking at nature calendars or by searching the Internet for information on "meteor showers and their dates."

Science: Animal Skeletons On the Prairies

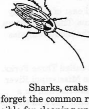
During the time of the Old West, and still today in cattle country, one can find skeletons of cows that have died. These animals may have been taken by a predator, or been weakened by illness, but after their death the skeletons are left as a reminder of their hardships.

Ask your student if he knows how the skeletons become clean and white. (The bones become cleaned of meat through the process of decay, which is sometimes helped along by scavengers. Meat (and plant life) **decays** through the action of bacteria, molds and yeasts that thrive under warm conditions and break down (or simplify) the chemical substances of dead animals (and plants). After the meat is decayed and/or scavenged from the bones, the bones become clean and white through the action of the wind, rain and searing sun.)

Scavengers (you may have touched on this subject briefly in the lessons for *The Story of Ferdinand* featured in *Five in a Row* Volume 1) are animals who eat dead putrefying meat (carcasses). While many animals will consume fresh kill, not every animal will eat meat that has been dead awhile and is already decaying. Therefore, since meat begins to decay quickly in the elements and heat, and since most animals won't eat such decaying food, scavengers are extremely useful in keeping the many carcasses of dead animals from remaining on the ground causing pollution.

Before naming some of the more common scavengers, guide your student's thoughts for a moment to observations he has made in the past. What kinds of animals will go through garbage cans for food? (dogs, raccoons, crows, sea gulls) What kinds of animals are seen near dumps and sewers? (rats, cockroaches, crows, vultures) If your

student has noticed animals eating garbage and frequenting places of decay, these animals are probably the scavengers.



A few scavengers for the plains and mountain areas of the west include condors, vultures, seagulls, crows, opossums, coyotes, fox, raccoons, bears and in higher elevations the wolverine. There are many more scavengers, including species of fish (such as catfish), etc.

Sharks, crabs and lobsters are just a few examples of marine scavengers. And don't forget the common rat and the magnificent cockroach. Both of these creatures are responsible for cleaning up much decaying animal and plant life. Many of the creatures that are the best scavengers are the ones most shunned by man. Partly because they like decaying carrion they are repulsive to some people, and even more because as these scavengers eat the decaying material, they are picking up dangerous bacteria which can often cause sickness to man. Housewives try to keep a clean kitchen to discourage cockroaches and rodents and their accompanying germs from entering. Yet, out in the wild these creatures are invaluable in keeping their environment clean.

Science: Mountain Habitat

The Rocky Mountains have several different habitat areas each with particular flora and fauna (plants and animals) These flora and fauna do overlap somewhat in each of the habitat areas, so the following information is general. In the foothills of the mountains there are shrubs and deciduous tree with deer, squirrel and many other species while down in the valleys live such animals as moose, beaver, coyote, and muskrats.

As the elevation increases pinion pine and junipers grow and there are deer, elk, bear, squirrel, etc., Higher up firs and pines grow in more abundance and this is the home of the bighorn sheep whose habitat extends above the timberline, as well.

Above the **timberline** there are no trees. The timberline is the designation, above which, trees do not grow due to higher altitude conditions including cold temperatures, lack of moisture, and sometimes snow pack over many months, though not all year. Your student can see the timberline in pictures of the mountains, but it is so much more exciting when he catches the first glimpse of a real timberline, for himself!

There are, on some mountains of high elevations, alpine areas where only a few types of plants and wildflowers grow. Finally, the peaks of some of the mountains have snow cover year round.

For a wonderful illustration of the mountain habitat, look at the picture Jeanette Winter paints –the one opposite Jake and Charlie in the cabin. There are beaver in the valley, trees on the slopes with bear and elk, and then in the higher elevations mountain sheep with far fewer trees and in the background, above the timberline no trees at all. Each creature that the author describes in her writing, she also paints and she adds a few that are not in the texts for good measure. Look at other scenes and let your student have fun identifying the birds, and animals.

Science: Rivers - The Mississippi and the Missouri Rivers

The Mississippi River handles the watershed from all the land east of the Rocky Mountains as well as a great deal of the land west of the Appalachians. The headwaters, or the source of the Mississippi River is in northern Minnesota and the mouth empties into the Gulf of Mexico at the New Orleans, LA, delta.

The Missouri River begins in southwestern Montana at a spot called Three Forks. And it actually flows all four, map directions before emptying into the Mississippi River just north of St. Louis. Ask your student, as he is searching out this information on a map, if he can explain how a river could flow in these various directions? Let him consider this question for awhile. What is actually happening? (Remember that water, pulled by **gravity**, flows downhill. The point at which the Missouri River is birthed up in the mountains of Montana is the highest point between the source of the Missouri River and it's mouth (where the river empties into the Mississippi) just north of St. Louis. Therefore, the river flows northwest *downhill* then north-east *downhill*, then east *downhill*, then south *downhill*, east again *downhill* to the Mississippi!) It might be interesting to find a bas-relief map of the United States, sold through some map stores, or home-school catalog resources or at natural history museums to see how the river flows. If your student wishes, he could make a map with Playdough® or flour dough, to see how this actually works. With some help he could consult topographical maps which show the actual elevations and make a scale replica.

Science: Conservation – National Wildlife Refuge

In order to preserve natural areas of interest in the United States, National Wildlife Refuges as well as National Parks have been established. Your student may enjoy learning something of the history of these measures of conservation. A National Park or Wildlife Refuge is declared to be so by an act of Congress. In 1872 Yellowstone was declared the nation's first National Park! John Muir, naturalist, was largely responsible for efforts to have Congress name Yosemite and Sequoia National Parks as well (1890). And President Theodore Roosevelt led various conservational efforts during his time in office.

Research from *The World Book Encyclopedia* or the Internet will help your student discover much about our National Parks and the many famous people who worked toward conserving America's areas of beauty and interest. If your student is able to look up "National Parks" in *The World Book Encyclopedia*, he will see the map of preserved sites across the country and be amazed at how many national parks and areas of wildlife refuge there are.

Did your student know that in Montana there is the Charles M. Russell National Wildlife Refuge? You can see it on the map of Montana in *The World Book Encyclopedia*. Maybe you and your student could actually visit there someday!

Bible Lessons

When Cowboy Charlie first reaches the West, he takes a job for a sheep rancher. But, Charlie keeps losing the sheep! He isn't a very good shepherd, but he is a good artist. You can take this opportunity to talk about what makes a good shepherd and read the verses where Jesus calls Himself The Good Shepherd. (John 10:11. Then finish with the parable of the lost sheep. Luke 15:4-6. Isn't your student so glad that Jesus is the best shepherd and that he cares so very much for His sheep?

John 10:11
Luke 15:4-6

Cowboy Charlie had a mother, father, four brothers and a sister, that loved him. Love is such an important part of family life. Ephesians 3:14:19 is a beautiful passage about learning how much God loves each person and Ephesians 5:1-2 which says to be imitators of God and love each other. 1 John: 1 says to love one another and 1 John 4:7 & 19, and 3:11 & 16 are all verses dealing with aspects of loving each other.

Ephesians 3:14-19
Ephesians 5:1-2
1 John 1
1 John 4:7 & 19, 3:11 & 16

This wonderful family that Charlie had included a great-uncle, a grandfather, and an Uncle George. There may have been grandmothers, aunts and cousins as well, though the story doesn't say. Has your student ever considered how much of the Bible is concerned with families? All the "begat" passages in the Bible are speaking of family lines. Genesis 5 gives a genealogy from Adam to Noah. In Genesis, Chapters 10 and 11 the genealogy continues from Noah to Abraham. Then Jesus lineage (his family line) is given in Matthew, Chapter 1:1-17, which traces the family lines from Abraham to Jesus!

Genesis 5
Genesis 10 & 11
Matthew 1:1-17

Let your student think about some of the families of the Bible. Noah's family who was saved in the Ark. Abraham's family, who traveled, and Moses' family as well. Joseph's family who spent time in Egypt. David's family and the story of how he was chosen to be king from among his brothers. There are countless others throughout the Bible.

The Lord seems to be concerned that people have a family to be a part of. Think of the stories of Ruth (The book of Ruth), Mephibosheth (I Samuel 9. God call Himself our Father and calls His people, His children. Christians therefore, as well as members of their own families are also a part of the family of God.

1 Samuel 9

Jeanette Winter writes that Charlie Russell did not do well in school. He didn't apply himself to his lessons but daydreamed about the West instead. Even if Charlie did leave school at 15 years old, he might have done better to make good use of his time and daydream later. He sort of wastes the time he is given. Psalm 90:12 says that we should learn to number our days, that we might present to God a heart of wisdom. Ephesians 5:15-16 says to be careful of how you live, not to be unwise but to be wise, making good use of your time.

Psalm 90:12

Ephesians 5:15-16

Charlie Russell looks at the panorama of beauty he sees around him in the West and calls it Paradise. By this he means the most beautiful place he can think of. There are some references to paradise in the New Testament. Luke 23:43 where Jesus is speaking with the criminal on the cross and telling him that he will be with Him in Paradise, and Revelation 2:7 where it talks of the tree of life in the Paradise of God.

Luke 23:43

Revelation 2:7

Cowboy Charlie made it to the land of his dreams. Psalm 37:4 reminds us to delight ourselves in the *Lord* and he will give us the desires of our hearts. We can't tell for sure if Charlie knew the Lord, but as for us we can keep our eyes on the Lord Himself and love Him, and we know that He *will care* about the desires of our hearts.

Psalm 37:4

Remind your student that when Charlie Russell finally reaches the land of his dreams when he is fifteen years old. He tries a job watching the sheep, loses them, and consequently he is fired. Then a fur trader named Jake befriends him, gives him a place to live (in Pig-eye Basin) and teaches him all about living in the woods and the animals there. From this story, it seems as though Jake is a wonderful example of Romans 12:13, being hospitable as well as 1 Peter 4:9 and Hebrews 13: 2 where believers are encouraged to be hospitable to one another..

Romans 12:13
1 Peter 4:9
Hebrews 13:2

Remember how Cowboy Charlie enjoys telling stories to entertain the cowboys he works with? Jesus told lots of stories to show people what the Kingdom of God was like. These stories are called Parables and you can find some of these in the 21 Chapter of Matthew, others in the 7th and 8th Chapters of Luke. The Gospels: Matthew, Mark, Luke and John, are the books that have the parables Jesus taught.

Matthew 21
Luke 7 & 8

❧ ❧ ❧ ❧ ❧

Exodus 25:1-9
1 Kings 7:13-28
Proverbs 31:22

Like Charlie, are there any artists in the Bible? What about the artisans that built the Tabernacle, Exodus 25:1-9, and Hiram whose works were in the Temple Solomon built, 1 Kings 7:13-28? What about the woman in Proverbs 31 who spins fine linen, Proverbs 31:22? Can your student think of other examples of artist's work?

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Genesis 1

Creation- When Charlie wanted to create he painted, drew, or sculpted figures from wax all the things he could see around him. Look through the story for illustrations of Charlie painting and sculpting. Now read Genesis Chapter 1. Can your student see anything to compare and contrast in this passage? When Charlie wanted to create he made the creatures with his hands or painted them with his paints. When God created, He spoke! He said things like, "Let there be light." And there was light!

Except for the creation of man, and then it says the Lord formed man from the dust of the ground and made him in His own image. The Creation story is a wonderful passage. So is the fact that the Lord gave giftings to Charlie to reproduce with paints and bits of beeswax what he saw everywhere around him that the Lord, Himself, had made.

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Psalm 19:1
Psalm 8
Philippians 2:14

Remind your student how Cowboy Charlie loves the stars, whether he is watching them from St. Louis or under the Montana sky. Psalm 19:1 says the heavens (stars and all) declare the glory of God, and Psalm 8 talks of of the wonders of the heavens, while Philippians 2:14 says God's people are to behave in such a way that they appear as stars or lights to the world.

RECIPES FOR ADVENTURES FROM THE OLD WEST

The American West, as the cowboys knew it, had specific chuckwagon fare. Here are some dishes that might have been enjoyed around the campfire. The Beans and Biscuits, and Peach Pandowdy both could have been made in a cast iron dutch oven tucked into the fire's coals. Decorate your table with a western theme and have a round-up dinner with your family.

Chef's Corner: If you have an old cast iron dutch oven with a lid, you could try making one of the following recipes in it. If you have a new cast iron dutch oven, there will be seasoning directions that are very important to follow. This will ensure that your utensil cooks the most efficiently. If you do not have directions: Season the pan it by rubbing it with Crisco (not cooking oil), and baking in the oven at 350 degrees F. for an hour. Do this two or three times, before using the pan. Afterwards, to clean up, you need only to use water and a soft scrub pad and swish out the foods with hot water. Then place the pan on the stove on low heat to dry it thoroughly. Tak a paper towel and rub a little more Crisco on the inside of the pan. Take off the heat. (The heat will allow the pan to absorb the Crisco, keep the pan from rusting, and make a smooth pan surface for cooking.)

Cowboy Beans and Biscuits

1 lb. ground beef
1 can kidney beans
1 can butter beans
1 lb. can pork and beans
1/2 cup catsup
3/ 4 cup brown sugar
1 tsp. dry mustard
2 Tbs. Vinegar
1 can golden corn biscuits (or 1 can of corn twists) Or make up your own cornbread mixture and spread it on the top after the beans have baked for 30 minutes. Bake till the cornbread is done, more like the cowboys would have done!

Brown ground beef. Season with salt and pepper. Combine everything else and mix well. Pour into a casserole dish and bake at 350 for 20-30 minutes. Separate the corn biscuits and place equally across the top of the cowboy beans.. Bake for an additional 15-20 minutes or until the biscuit topping is golden and crisp. Serve immediately.

Peach Pandowdy

1 pound peach slices, thawed if frozen
1/3 cup dark brown sugar
1 tablespoon lemon juice
1 teaspoon cinnamon

1/3 cup dried cranberries (or dried cherries)
11/4 cups flour
1 teaspoon baking powder
3 tablespoons sugar
1/4 teaspoon salt
2 eggs
1/3 cup milk
1/4 cup unsalted butter, melted
1 teaspoon vanilla

Preheat oven to 400°F. Butter 2-quart shallow baking dish. Combine peaches, brown sugar and lemon juice in bowl. Sprinkle in cinnamon and toss. Let stand for 10 minutes. Transfer to prepared baking dish. Sprinkle dried cranberries over the top. Combine flour, baking powder, sugar and salt in bowl. In mixing bowl, beat eggs, milk, butter and vanilla. Slowly beat in dry ingredients. Mix until just smooth. Pour evenly over peach mixture. Bake for 30 minutes, or until lightly browned.

Homemade Sarsaparilla (Rootbeer)

3/4 cup granulated sugar
3/4 cup hot water
1 liter chilled seltzer water
1/2 teaspoon plus 1/8 teaspoon root beer concentrate

Fully dissolve the sugar in the hot water. Add the root beer concentrate. Stir completely and the let the mixture cool. Combine the root beer mixture with the cold seltzer water. Serve in frosty mugs immediately or store in refrigerator in tightly covered container.
Makes 5 cups.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	Grass Sandals
Author:	Dawnine Spivak
Illustrated:	Demi
Copyright:	1997
Summary:	The true story of one of the most famous Japanese poets and his marvelous travels!

Social Studies: Geography - Japan

Ask your student in what country the poet-traveler Basho lived. (Basho lived in Japan.) Does your student know where Japan is? Can he find it on a map? When he looks at Japan on a map, what can he tell about this country compared to other countries around it? (Japan is a relatively small country in area, and it is an island. Actually Japan is made up of many islands.)

Place the story disk on Japan. Spend time enjoying the map of things Basho sees on his travels, at the end of the book *Grass Sandals*.

Social Studies: East Meets West

The story *Grass Sandals* begins with a dedication in which the author's daughter says, "nothing happens in this book," to which the mother/author replies, "That is what Westerners say about Japanese writing." Through this story you may be able to very simply begin to show your student how Eastern and Western cultures have often differed in thought and philosophies.

The Far Eastern countries, which include Japan, have many aspects that are presented quite simply compared to Western counterpart. The art, writing, preparation of foods, and clothes are often presented with graceful simplicity. That does not mean the writing, recipes, fashions, etc., are not complicated. Each one of them may take a great deal of time and effort to make or prepare but the presentation is marked by simplicity. There is much discipline, control, and calmness throughout Eastern traditions. Traditionally there has been no sense of "rush" in the cultures of Far Eastern countries. Many of these traditions are followed in the same way as they have been for centuries.

In contrast, the Western cultures tend to be active, fast paced, inquisitive, always willing to explore new methods, often adopting them in fashions, art, foods, etc. While Far Easterners have paid close attention to their past traditions, generation after generation, Westerners are more likely to shun their own past as old-fashioned. People of Western thinking are constantly looking for new (and to them better) ways of doing things and there is a recurring sense of rush to the pace of life. This explanation is quite simplistic but it is only the merest introduction to the ideas of differences in the two cultures.

How does Basho combine the two lines of thought into his own standard of living? He values simplicity in his possessions and his pace of life. He doesn't have too many possessions—at least he is able to leave his home to travel and he does not carry much with him. But, more like a Westerner, he does cover extensive areas of land, he is observant, inquisitive, creative and has many adventures.

Much of Eastern thought and expression has traditionally been subtle. A story, or art, or a play will unfold quietly and though many things are not said or shown, clues tell you what is happening. In contrast Western culture tends to be more graphic and less subtle.

Encourage your student by saying, "Let's see if we can read carefully enough to see all the wonderful events happening in this true story of Basho. If so we'll be reading more like an Easterner, and perhaps not in so much in a hurry like a Westerner!"

Social Studies: Culture of Japan

Your student was introduced to the culture of Japan in the *Five in a Row* Volume 1 story selection *A Pair of Red Clogs*. If you studied these lessons, you will be ready to dig deeper into the present day Japanese life and culture.

Today Japan is a modern bustling country with cities, offices, theaters, etc., much like the United States. One of the biggest differences between the U.S. and Japan is the smaller size of the country of Japan. Because Japan is not large geographically there is a greater concentration of people per square mile. In fact there are approximately 850 people per square mile, as opposed to United States approximately 75 people per square mile and Canada with about 8 people per square mile! (Remind your student that these figures are averages. There are densely populated cities in the U.S. but there are also miles and miles of unpopulated areas—farms, ranches, national forests, etc. The category was density per square mile—and that is found by dividing the total population of a country by the total area in square miles.)

In order to study modern clothing, homes, vehicles, etc., of Japan find some good simple books at your library. You may want to check the adult travel books as well. Perhaps a travel video would have some enjoyable information, but do preview before you watch with your student! You will see that life in the cities of Japan has become just as fast paced as it is in American cities, and the differences in the cultures seem on the surface, at least, to be less than in the past.

Social Studies: Culture of Japan - Japanese Writing

Traditional Japanese writing, which your student can see on the back cover of *Grass Sandals*, is considered by many to be the most difficult writing system in the world. It is a combination of phonetic sounds and Chinese characters. As many as thirty separate brush strokes form each of the characters! The order of each stroke in the character is predetermined and has traditionally been taught without deviation. In other words, the children had to learn each brush stroke "in order" for each character in their language, with as many as thirty brush strokes per character.

Copy the back cover of *The Grass Sandals* and cut out each Japanese character. Place one each on a file card and write the word it represents on the back. Have fun learning these Japanese words.

Another game you can play with these word characters is to make two photocopies. Cut the copies apart and glue each character onto an index card. You should now have nine pairs of cards—18 in all. Now place the cards (blank on the back) all face down and mix them up. Your student can play the match game—just looking at the differences in the marks of the figure. This would be an exercise in observation and memory!

Social Studies: Character Relationship - Friendship

Basho had friends and Basho made more friends. This traveling poet of Japan enjoyed people and he was willing to cultivate new friendships as well as maintain established ones. Ask your student if he thinks it is easy to make a friend? Discuss ways to meet people and how it is often through a common interest that friendships are begun. Talk about ways to maintain friendships. Discuss how to keep up with friends through visits, letters or phone calls, as well as helping when a friend is in need. Talk about the importance of making up after arguments, or clearing up misunderstandings, etc., and converse about what happens to a friendship if these breaches are ignored.

Language Arts: Biography

Grass Sandals is the story of a man who actually lived in Japan, who had adventures and who wrote poetry. Does your student remember the name for this kind of book (as opposed to a fiction work)? It is called a biography. The word biography comes from the Latin word for life (bio) and graph (writing). A biography is a book written about an actual person who is now living, or who has lived in the past. Biographies are wonderful books to read because through reading them you not only get to know a real person but you learn much about the places, events, people and times which surrounded him.

You can easily find a biography at your library. They are in a special section called Biography and are usually shelved alphabetically by the name of the *person they are about* rather than alphabetically by *author* as fiction books are.

Have fun with your student exploring the Biography section of your library and check out a few simple biographies to read together. (Two good authors to check in your library system are Robert Quackenbush and Diane Stanley.)

Language Arts: Details in Writing

Talk with your student about the fact that authors can make a reference to an idea early in a story and then complete that idea at a later time. On about the fifth page of *Grass Sandals*, Basho is painting on his hat. Does your student remember what Basho painted? Basho addresses his hat (like he would a person) and says that he will soon show it cherry blossoms. Three pages later the Japanese poet says that he has "*kept his promise to his hat*." This is not a critical point or lesson. It just demonstrates the well executed details in the writings of Dawnine Spavik. Your student can tell or write a story that has similar writing techniques included.

Did your student comment on the description Spivak makes as she compares Basho, walking along dressed in black robes, to a crow? Does he remember that this is a form of simile?

Language Arts: Poetry - Haiku

Haiku (pronounced HY koo) is a beautiful Japanese form of poetry that has a very specific form or pattern. Basho, in our story *Grass Sandals*, was a poet of Japan and he wrote many haikus. Let your student know that he, too can write a haiku like Basho did. All he needs to do is follow the pattern.

[**Teacher's Note:** Before you try to explain how to write a haiku, make sure your student understands how words are divided into syllables and is able to *sound* them out. Let your student know that when he has mastered this information he can write a Japanese haiku for himself. For practice you can clap with your students—one clap for each syllable of a word. For older students, you may also use this as a Language Arts opportunity to explain how words are hyphenated at the syllable breaks. Explain that this information will help them in their writing and in typing when a word is too long for the end of a line—they will know how to properly divide the word and place part of it on the next line down.]

A haiku is made up of seventeen syllables arranged specifically in three lines of verse. The pattern is 5,7, and 5 syllables. Each line has a specific number of syllables and somewhere in the words is generally hidden a clue about the season of the year. The word frog might mean summer while daffodils might mean spring, red-yellow leaves-fall, etc. The entire haiku is often about something very simple in nature or some event told simply with just a few words but these few words paint a word picture that everyone can enjoy. Below is an example:

In the still evening	5 syllables
leaping out of a river—	7 syllables
splash five little fish	5 syllables

If your student enjoys departing from familiar form he may like the fact that the three lines do not have to begin with capital letters and that he can use the ellipsis (...) or the double dash (--) at the end of the first or second line as a pause.

Enjoy experimenting with this wonderful poetry form and illustrate the finished results, if you wish, as Basho did.

Language Arts: Vocabulary

curve	in a bending line (like fog curving over the hills)
satiny	smooth and shiny
winding	with many bends and curves, as in a river or path
scribbled	wrote down quickly without regard for neatness
restless	a feeling of wanting to be up and moving rather than still

Language Arts: Supplemental Books

The illustrator of *The Grass Sandals*, Demi, wrote and illustrated a book called *The Empty Pot*. This is a thought provoking and enjoyable book to read and would be a great go-along with *The Grass Sandals* as well as giving you more chance to examine the illustrations of Demi.

Also, at this time, you might enjoy re-reading *Grandfather's Journey* and *A Pair of Red Clogs* to pull together details from life of the past in Japan.

And, one last idea: Find at your library or bookstore a book called *Emily* by Michael Bedard, illustrated by Barbara Cooney. This is an interesting story of the reclusive American poet Emily Dickinson. In the story *Grass Sandals*, Basho writes a poem and sends it back in a saddle-bag to the farmer who let him borrow the horse. In *Emily*, Emily Dickinson gives a poem away as well. Let your student listen to or read this story and see if he observes the similar actions of these poets, even though one of them is very social and one of them is not.

Art: Action in Illustration

While the men in the trees sat still and went nowhere, Basho went many places and had many adventures. Look at the illustrations throughout the story and see how artist Demi has quietly and gently tucked a great deal of action into her illustrations. The end papers show Basho writing on a leaf. The title page shows the rush and flutter of many cranes ascending as Basho is again at work. On the page that describes a haiku (after the dedication page) notice the deer leaping, and Basho's feet in a happy walk. On almost every page there is water moving, or birds flying or animals running, fire blazing or wind blowing. Yet, all of these illustrations still serve to highlight Basho's quiet personality with their calmness and beauty, even in action. (Maybe it is just Basho's quiet, delighted reaction to the movement around him that makes it feel like even the movement is calm.)

Art: Grass Paper and Calligraphy

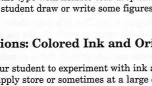
The paper with fibers used in the background of the pages for *Grass Sandals* is grass paper. You can find grass paper in different colors and with different amounts of texture at art stores and possibly large hobby/art supply stores. Grass paper usually is not as absorbent as some other kinds of papers and is sometimes used for calligraphy.

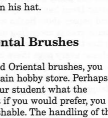
Calligraphy is an art form that consists of beautifully rendered handwriting. The art form dates back to early Chinese times. Today there are many different styles of Calligraphy (each having a different letter-form to its alphabet) and it is used to letter formal documents, greeting cards, posters and framed sayings and artwork. Calligraphy is accomplished with ink and a brush (as Basho uses) or pen. The ink will soak into paper that is absorbent, and fine, beautiful lines will not be possible. Therefore, calligraphy artists use grass paper and other non-absorbent papers for their work.

You can also take this opportunity to explore paper making. The *World Book Encyclopedia* will explain how commercial paper is made. And then you may wish to try making some paper of your own. Handmade papers are beautiful and valued, as each handmade page is unique. There are paper making kits available at hobby and art stores.

Art: Painting a Hat

For a simple art project buy a few sheets of brightly colored poster board. Cut an 18"-24" diameter circle from the poster board. Now cut it from one outside edge to the centerpoint. Now twist (or wind) your circle into a cone hat. Either tape or staple the overlap to make the cone-shape secure. Now attach shoestrings or twine on each side about halfway between the rim's edge and the cone's point to tie loosely under the chin.





Then with a brush (the type with flexible tear-drop shaped bristle cluster) and some black paint, let your student draw or write some figures on his hat.

Art: Illustrations: Colored Ink and Oriental Brushes

If you would like your student to experiment with ink and Oriental brushes, you can find these at an art supply store or sometimes at a large chain hobby store. Perhaps you may only wish to go to one of these stores and just show your student what the brushes look like. There is authentic Oriental ink available, but if you would prefer, you can inquire about inks that would work as well and still be washable. The handling of the brushes and ink might be an activity better suited for the older range of *Five in a Row* student.

The Oriental brushes have long wooden handles, often made of bamboo, and bristles of different types of hair—wolf, rabbit, goat, etc. The tips of these brushes are not squared off but taper to form perfect points when the brushes are pulled from the ink. These brushes are held upright in the hand (at a 90° angle to the flat paper on a desk) when painting or writing. Look how Basho holds his brush in the picture on the end papers.

Experimenting with Oriental brushes is a great deal of fun. Find a book on Japanese painting techniques and let your student try some brush strokes and maybe even draw some bamboo! Plain white newsprint is the best practice paper for the ink. Cover the working place with plastic or an oilcloth and make sure a smock or old shirt covers the clothes! Teacher and student alike will have a great deal of fun trying out some new art techniques.

Art: Appreciating the Various Treatments of Water

Demi has used many different techniques in painting water for the story *Grass Sandals*. With your student look through the entire book, making note of rivers, ponds, streams, waterfalls, etc. Let your student try some of these techniques if he is interested.

Art: Sewing

Basho sews ties on his hat so it won't blow away. Take this opportunity to explain and demonstrate some simple sewing techniques. Find appropriate small projects suitable for your student's age and interests. A simple project might be binding a pair of moccasins (you can get kits at craft stores).

You may enjoy teaching a bit of history surrounding sewing, like how the Indians used bone needles, or about seamstresses and tailors who hand sew and/or use sewing machines, or about the invention of the sewing machine. (The sewing machine was invented in 1790 but never patented or produced. In 1830 a Frenchman also invented a sewing machine. But it wasn't until 1851 that **Isaac Singer** patented and began producing the Singer sewing machine. Because of his patent and production, Isaac Singer's name is usually associated with the invention.)

Math: Century

With the background information that a century is a unit of measure, used for measuring years, and that a century consists of one hundred years, you can proceed to the lessons below.

The page after "What Basho Saw" at the end of the book *Grass Sandals* speaks of Basho living in the seventeenth century. The dates given for his life are 1644-1694. Ask you student to figure out how old Basho was when he died using subtraction. (Basho was fifty years old.) Now ask your student if he can determine why it says Basho lived in the seventeenth century while his life dates are in the 1600's. (Explain that the years one through one hundred after the birth of Christ are called the first century. The years 101-200 A.D. are called the *second* century, etc. Your student can see, for example, that the

years of 106 A.D. and 149 A.D. were in the second century. In like manner the 1600's when Basho lived were in the seventeenth century!

How many centuries have there been from the seventeenth century to the present? Basho lived that many centuries (or groups of 100 years) ago. (Basho lived over three centuries ago.) The last information page says that there was another poet who lived a century after Basho. What century would he have lived in? (He would have lived in the eighteenth century or the 1700's.)

By knowing the date of the present year, can your student determine what century he is living in? (The 21st Century.)

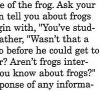
Science: Astronomy - The Milky Way

The Milky Way is actually a galaxy which includes multitudes of stars (our Sun is one of them), as well as all the planets of our solar system. Though it is technically an entire galaxy, we also use the term Milky Way when speaking of the band of closely grouped stars which appear at night like a band crossing over the sky. In areas where there is little light pollution, these stars are so close together that look like a faint milky swath across the sky. If your student is interested, find a simple book on the Milky Way at your library.

Science: Zoology - Frogs

If you have studied the FIAR Vol. 3 story selection *Andy and the Circus*, you may have already introduced the subject of amphibians and the life cycle of the frog. Ask your student if he remembers *Andy and the Circus*. Ask him what he can tell you about frogs and tadpoles. (Respect requires that this line of questioning not begin with, "You've studied this and you *should* remember—what *do* you remember?" but rather, "Wasn't that a great book—*Andy and the Circus*, and all the things Andy had to do before he could get to the big top? Do you remember that Andy had some tadpoles in a jar? Aren't frogs interesting? Do you have a favorite kind? What are some of the things you know about frogs?" This type of questioning is far more likely to produce a friendly response of any information that your child knows about the subject. Once you know how much your child already knows, you can proceed with new information.)

If review is needed, give the introductory information over again. Frogs are considered **amphibians**. Amphibians are animals that ar born in the water, breathe air through gills, go through life cycle changes and spend their adult lives mostly on land breathing air through their lungs. The general life cycle of a frog is egg, tadpole with no legs, with growing legs, and adult frog. A good simple book from your library or the information in Volume 3 of *Five in a Row* may be of help.



If review is quick or not necessary then you may deepen your study by discussing the **habitat** of frogs. Frogs live everywhere except Antarctica. Frogs usually prefer moist areas, but most frogs do not live in the water—they may jump in the water to get away from danger, but most frogs live on land. A frog has many **natural enemies** including

snakes, hawks, and herons. A frog's **diet** usually consists of insects, worms, etc. There are many different **sounds** made by frogs, perhaps you can find a web site with sound bites to listen to. Or better yet, observe in person during the spring and summer months by ponds, streams, lakes, etc.

A frog both absorbs and loses water through his skin, especially its abdomen. Therefore, frogs need a moist environment and it may be that many kinds of frogs are active at night because the hot sun would cause them to become **dehydrated**. (Dehydrated is made up of the prefix "de-" meaning "remove" and the root word "hydrate" meaning "water" so that to **dehydrate** something is to remove the water or moisture from it.)

Try taking a field trip to a good pet store to see exotic varieties of frogs. You can also find books on frogs that continue beyond the "simple information" level with more detailed information if your student is interested.

In addition, your student may enjoy ordering and receiving literature on amphibians from your state conservation department. This type of literature will showcase the amphibians that are in *your* state—the frogs, toads and salamanders your student would be the most likely to see on a regular basis.

Remind your student that in the story *Grass Sandals*, the frogs about which Basho writes a haiku would be those frogs native to Japan. Some frogs that live in North America also live in Japan—the American Bullfrog is one of them, though it would have a Japanese common name. But there are many others which you can learn about using a book that tells about frogs around the world or a good Internet search engine—type: "Japan frog", if your student is interested.

It might delight your student to visit a pond in the summer and just walk around it near the edge. He may hear the frightened squeaking sound of a frog as he plops into the water ahead of your student's feet! It is sort of an "eek—plop" sound. If he stands quietly and searches, your student may be able to spot the frog in the water—eyes above the surface watching him. Does your student notice the frog's eyes? Can he understand through his observation how having the eyes at the top of the head helps the frog? With these eyes, a frog can see while most of his body is underwater and he can see in almost any direction! Maybe your student could write a poem or haiku about his experiences observing nature, just like Basho did.

Science: Botany - Bananas

The famous Japanese poet was given a banana or basho tree. He planted it and watched it grow. It was so delightful to him that the author of *Grass Sandals* says he changed his name to Basho!

Technically or scientifically, the banana tree is not really a tree because it does not have a wood trunk or real boughs. Rather it is considered an extremely large plant! You and your student can easily see that this is true in the illustration of the banana plant next to Basho's house on the second page of the story. The illustration shows a plant

with very large leaves. These leaves are not boughs but rather come up from the center of the plant. It is just the enormous size of the banana plant that causes some people to call it a tree. (**Teacher's Note**: Your student can examine many plants, trees and shrubs and learn for himself which have woody trunks and boughs [or woody stems like some shrubs] and which have herbaceous or soft plant stems.)

The banana plant produces the banana fruit which is considered to be one of the most popular fruits in the world, and ranks in the top five of the major food crops of the world. The banana plant needs a climate that is very warm and moist. Can your student determine, based on his knowledge of geography, where in the world might be a good place to grow bananas? (If a first thought is only a warm place, remember that it must be a moist climate as well!)

Does your student remember the term tropic or **tropical regions** and where these are located? Do the terms **Tropic of Cancer** and **Tropic of Capricorn** give him a clue? The tropics lie in a wide band around the world between these two parallels of latitude. On a map or globe have your student find these two parallels of latitude if he knows them. If not show him where they are located and indicate the amount of land that lie between them. Let him examine what areas and countries are to be found in the tropics.

Maybe your student remembers studying *How to Make an Apple Pie and See the World*. In the lessons for that story in *Five in a Row*, Vol.1, your student learned that bananas grow in Jamaica. Can he find Jamaica on the map or globe? Is it within this band of lands between the Tropic of Cancer and the Tropic of Capricorn? Actually, Central and South America grow bananas (Brazil is a large producer) as well as many other tropical areas around the world, including Hawaii, Florida, Mexico, etc.

Most of the bananas consumed in the United States are the yellow skinned fruit variety. There is also a darker, tough-skinned variety that is starchy and used more like a vegetable, not as often in the United States, but more often in other parts of the world.

The banana plant produces one large bunch of bananas and then dies and is replaced by younger growing plants. Bananas are also picked green for a very important reason: If the plantation workers waited until the fruits were ripe the skins would begin to split and insects would eat the fruit before it could be harvested. The green bananas continue to ripen and turn yellow and become sweet *after* picking them at the green, unripe stage.

Science: Chemistry - Bananas and Oxidation

Your student may already know that when a peeled banana is exposed to the air it turns brown. If you don't think your student has already observed this phenomenon, cut up part of banana as if it were for a snack, put it aside where he can see it, and leave it on a plate while you talk about bananas. When the fruit has begun to turn brown, ask your student if he remembers how light and pale it was when first cut. Bananas have chemical substances in them which are protected by the skin, but when peeled and sliced and left in contact with air these substances actually go through a chemical reaction (oxi-

dation) that turns the fruit brown. (This is also common reaction when potatoes and apples are sliced and exposed to the air.)

Citrus fruits have an acid in them that will slow down the enzymes which encourage the oxidation process. For that reason many cooks will add citrus fruit juice to a fruit salad that contains cut apples and bananas. The fruit will stay fresh looking for a bit longer until it is served.

Make a fruit salad (including apples and bananas) with your student. Add some fresh orange juice, lemon juice or pineapple juice and let him observe the results. Made an hour ahead of serving, and mixed well, the salad should still look fresh when it is eaten.

Science: Botany - Bamboo

Bamboo is a plant that is a member of the grass family. Even though your student may have seen tall clumps of grasses, bamboo is a giant! It can grow over one hundred feet high! Used in hundreds of applications all over the world, bamboo can be eaten (cans of tender bamboo shoots can be found in the oriental section of your grocery store), as well as used to make homes, roofs, baskets, shoes, ornaments—the uses are endless.

Like bananas, bamboo grows well in tropical climates or in some warm temperate climates. If your student is fascinated by all the amazing uses for bamboo, he might enjoy a book from the library with more detailed facts.

Science: Botany - Flowers

Basho was content to sit and drink tea "in the company of his morning glories." Has your student ever seen the brilliant and soft blues of morning glories with the morning sun shining on them? Has he ever thought of a plant as "company?" Morning glories are indeed a beautiful sight worth savoring!

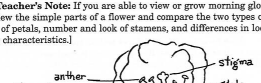
Morning glories are a flowering plant that is grown from seed. They form vines that cling to any support and climb more each day. The bright blue flowers open at dawn and close by afternoon. New flowers bloom the next day. Morning glories have provided cheerful displays of brilliant blue for countless generations of flower lovers. Try growing some morning glories with your student and enjoy them as Basho did! (Though these plants are grown from seed and you can find the seed packets easily at any mart-store or gardening shop, you can also find pre-started plants at greenhouse garden centers. Take extra care in transplanting them!

If you grow morning glories try this experiment. Have your student gently tie a string around the stem of the plant about six inches from the top point of the vine. Measure how far this is from the ground. As the plant grows upward, does your student think the string will stay in the same place or move higher? Wait a few days and observe. The string should be the same distance from the ground and the amount of vine above the string should be more than the original six inches. The vines grow by adding cells to the vine tip, not pushing up from ground level.)

Iris are usually bought as bulbs (the horticultural term is rhizome), which look something like a slightly flattened large cigar, and which run parallel to the ground (you may have to define parallel for your student) just under the soil's surface. These bulbs are planted in the garden in the fall or early spring for summer flowers. They can then stay in the ground year round and will multiply so that in a few years there are more flowers than the first year. At this point the rhizomes themselves have multiplied. They are then dug up and divided so that the plants will stay healthy. If all the divided bulbs are replanted, with some space in between, there will be even more flowers for the next few years. Many of the old fashioned American varieties of Iris have a lovely sweet bouquet or scent. (If you do not have a place to garden, you can often find Japanese Iris in florist shops or even grocery stores. Buy a few and enjoy them in a vase.) It is nice to think that whether you grow them or buy them you can usually find some Japanese Iris (smaller in blossom than our common Iris) to enjoy, just like Basho did!

The horse, which Basho borrowed, is seen eating Hibiscus flowers. These are large blossoms (sometimes dinner plate sized) which can be grown in some areas of the United States as well as in Japan. Check your gardening stores and ask if they have hibiscus plants and what type of growing conditions and care they need.

[**Teacher's Note:** If you are able to view or grow morning glories, iris, and hibiscus, review the simple parts of a flower and compare the two types of flower by: color, number of petals, number and look of stamens, and differences in look of pistil, and other defining characteristics.]



Science: Zoology - Cranes and Crickets

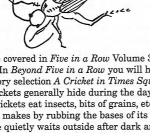
In the illustrations for *Grass Sandals* you can point out the cranes to your student. (You can find them on the title page, dedication page as well as the last page of the story.) These are the Tancho or Japanese Cranes. These beautiful, graceful birds have the sharply contrasting white with black edged feathers, and red "cap." The cranes have long legs and necks. Can your student think how these features might help the birds in their habitat? (The long legs are necessary for wading in the water to find food, and the long necks to stretch down and feed on snails, frogs, etc.

Ask your student if these birds remind him of any that he sees on occasion? Depending on where he lives, he might have seen a Sandhill Crane—which are the most abundant cranes on earth, or the Giant Blue Heron, or Great Snowy Egret. Tell him that cranes are easy to distinguish from herons by looking at their necks in flight. A heron's neck is doubled up in an "S" curve while the cranes stretch their necks out straight as they fly.

Cranes, of different varieties, are prevalent in much of Japanese art and decorating. Once your student has become aware of them he will notice cranes in Chinese restaurants, in magazine articles, at museums, or as garden decorations, where ever decorative Japanese art is featured.

In the story *Grass Sandals*, Basho notices a cricket. Perhaps he heard the cricket or perhaps he only saw it among the grasses. Basho was what some people call "in tune with nature" which means he was always noticing the birds, plants, animals and insects that lived around him. As soon as he noticed he would stop and watch (observe) for a while and he learned from everything he saw! He enjoyed being outside and enjoyed experiencing the wildlife around him.

Does your student remember how to tell a male cricket (the ones that sing) from a female cricket?



Female Cricket

Crickets were covered in *Five in a Row* Volume 3 during the study of *The Salamander Room*. In *Beyond Five in a Row* you will have the chance to study crickets in detail during the story selection *A Cricket in Times Square*. For now, you might add the information that crickets generally hide during the daylight and come out at dusk to feed during the night. Crickets eat insects, bits of grains, etc. There is also the wonderful sound that a cricket makes by rubbing the bases of its wings together. But, did your student know that if he quietly waits outside after dark and listens carefully, he will be able to hear the crickets chirp *within* an entire orchestra of other night singing insects? How many different sounds can he hear? Does each insect stop and start again, or do they keep up a constant trill? Are there any frog choruses tucked into the night's performance?

A wonderful book on this subject is *Discover Nature at Sundown* by Elizabeth P. Lawlor. It is in print and available from bookstores or perhaps your library. This is a treasure of a book for those truly interested in the animal behavior of the night. There is a bit of evolutionary material included so use it for your own teaching research and present only what you desire to your students. Read this book and you will have many fascinating pieces of information which will astound your students.

Science: Geology - Hot Springs, Cold Streams and the Sea

Did your student notice that on his travels Basho bathes in hot springs, splashes in streams that are cold and swims in the sea?

Can your student tell you how hot springs become hot? (Hot springs occur when underground water is heated by areas of hot rock or lava deep in the ground. This may be an opportunity to quickly cover the four divisions of the Earth's make up and core. The

Earth is covered in a thin layer called the Crust, below that the Mantle, then the Outer Core and deepest inside is the Inner Core. An encyclopedia or simple book from the library will have more information on this topic and colored illustrations which can be copied and placed in a notebook.)

Where does your student think the cold streams come from? (If he cannot tell you, find a picture of a mountain with snow at the top (there is one on the blue iris page). During the seasons when the snow melts, streams are created which flow downhill, icy cold!) Can your student tell you a main difference between the springs and streams, and the waters of the sea? (The hot springs and cold streams are considered fresh bodies of water, while the sea contains salt water.)

Science: Astronomy - Moon

Basho was content to live alone and travel alone, but he also enjoyed meeting new people and seeing old friends. In *Grass Sandals* Basho meets some friends and they enjoy watching the full moon, drinking tea and writing poems about the beautiful sights they see. Remind your student of this story tie-in as you begin your lesson on the moon.

In *Five in a Row* Vol. 2 you may have studied the phases of the moon during the story lessons for *Owl Moon*. If you need to, review this information briefly. (The moon's phases are: Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Waning Gibbous, Last Quarter and Waning Crescent. You can find a picture of these phases in The *World Book Encyclopedia* or by using your Inter-net search engine.) Some new information: New moon rises at sunrise, First Quarter at noon, Full moon at sunset, and Last Quarter at midnight.

Add some information about the topography of the moon. When a person looks at a full moon he sees some areas of light and some areas of grays. With a telescope one can begin to see that the gray areas are vast plains and that there are many craters on the surface of the moon. Most of the numerous craters were formed as meteors moved through the moon's thin atmosphere and crashed into its surface. (The Earth's atmosphere keeps most meteors from ever reaching the ground. The friction caused as a meteor moves through Earth's more protective atmosphere burns most of the objects up before they crash into its surface.)

The plains areas of the moon's surface were mistakenly called "seas" by early astronomers who thought they looked like bodies of water. Thus a topographical map of the moon would list some of the main plains areas of the moon as Sea of Tranquility, Sea of Rains, Sea of Serenity, etc. With a map of the moon's surface such as found in the *World Book Encyclopedia*, can your student figure out which plains areas make up the "facial features" which have traditionally been called The Man in the Moon?

You might also want to discuss briefly the lunar landing which took place by U. S. Apollo 11 Astronauts on July 20, 1969. A simple library book on this fantastic accomplishment might be extremely interesting to your student.

Science: Astronomy - Moons on Other Planets

Remind your student that when Basho and his friends drink their tea, by the light of the moon, they say that each friend saw a tiny moon reflected in his tea. Since Basho lived in Japan, on the planet Earth, the moon that all the friends see is the Earth's moon.

But did your student know that there are eight other planets in our solar system? Some of these planets have several moons! Can your student imagine having tea on Saturn and seeing 23 moons in his cup?

Mercury	0
Venus	0
(Earth)	(1)
Mars	2
Jupiter	16
Saturn	23
Uranus	15
Neptune	2
Pluto	1

Science: Weather - Rain and the Sense of Smell

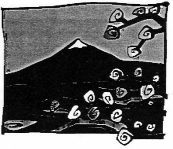
Basho says he can smell the rain. Has your student ever noticed the smell of rain drifting in on the wind before a storm actually arrives? Or the fresh damp smell after a rain? The next time there is a storm on the way, remind your student to be using all of his senses to experience the storm!

Science: Earth Science - Mountains

Remind your student that Basho travels over much of his country. He sees beautiful mountains and writes about them and paints them. Look with your student at all the paintings of mountains that the illustrator Demi has done for this story. See if you can find in a library book, on an Internet search, or in an encyclopedia some photographs of the actual mountains in Japan. Can you find the Japanese Alps? There are many other chains of mountains covering the islands that make up Japan.

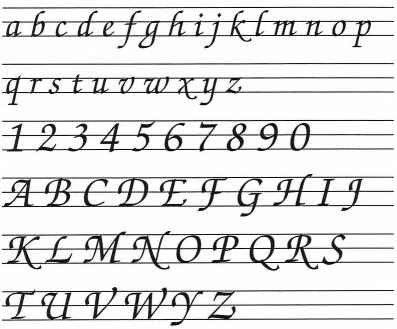
Does your student know the names of the mountain ranges in his own country? Cover these if necessary and then do a quick study on the names of the main mountain ranges of the world. This exercise is not for total memorization but for the introduction to the sounds of the names, and information about various countries or continents. Show your student the difference between an entire mountain range and a famous peak. For instance he may hear someone speak of the Himalayas and not know that Mt. Everest is the famous peak that draws so many to climbing adventures there. Or he may think that Mt. Everest is the range when it is only a single peak! Let him know that the abbreviation "Mt." when it precedes the name usually designates a single mountain.

If your student is interested, find the *Rand McNally Picture Atlas of the World*. In it you will find a wonderful graphic of many famous mountain peaks of the world lined up so that you can see which is the tallest, the smallest, etc. From this graphic you will be able to match famous peaks with their mountain ranges. The picture also shows how each famous peak has its own "face" or profile (familiar side). That is, some may be easily recognizable in pictures just because of the way the peak is formed. The Matterhorn, Mt. Kilimanjaro, Mt. Cook and Mt. Fugi (in Japan!) are rather distinctive in their shape.



Mountains also present a chance to study volcanoes. This may or may not be the time you would like to present this information, but it is mentioned for your consideration. A volcanic eruption can change the face or profile of a famous mountain, as it did for Mt. St. Helen in Washington State, U.S.

If your student has interest in learning a simple caligraphy-type alphabet, here is one to try. The lines show exactly how high each letter should be. Though eventually your student will use this skill on plain paper, while learning it is important to use lined paper for practice.Your student can use a chisel point magic marker or for even more fun and control he could try using a broad tipped cartridge ink pen made especially for caligraphy and available at an art store or hobby-mart type store in the art department. In the past monks laboriously transcribed and beautifully illuminated manuscripts in the caligraphic style. Today many women do caligraphic handwriting and artistic embelishing of documents, decorative plaques, etc., and graphic artists of both sexes use caligraphy, hand rendered or through computer fonts for their designs in advertising, publishing, etc.



Bible Lessons

Luke 5:1-10

Basho walked through many **fishing villages**. This brings to mind, Jesus who walked through fishing villages and called out his disciples! Read Luke 5:1-10 with your student and talk about what Jesus might have seen and thought about as he began to gather men about Him who would someday tell the world about the Lord! There would be the smell of water and fish in the air, the roughness of ropes and sails, the sight of blue water and white birds, sounds of boats creaking at their moorings. These men do what Jesus asks and let down their nets and catch many fish. But Jesus probably surprises them by telling them that they will one day be fishers of men! There is also a wonderful story of Jesus after his resurrection preparing a breakfast of fish for His disciples, on the beach. You can read about that story in John 21:1-13.

John 21:1-13

Basho walked over many miles and talked to many people. Ask your student if he knows that a man named Paul also went on many **journeys** and covered not only many miles, but many countries as well. Paul also talked to a great number of people and he told them about Jesus. Paul was able to help start churches in various cities and had many adventures, including a shipwreck.

Genesis 1:14-19

Basho and his friends enjoyed watching the beauty of the **moon**. The Bible tells in Genesis 1:14-19 that God created the moon on the fourth day. The moon reflects the light of the sun so that there is light at night as well! The Lord made the sun and the moon to be for light and for signs to mark seasons, days and years.

Exodus 8:1-12

In the story of *Grass Sandals* Basho hears a **frog** leap into the pond. Can your student think of an event in the Bible that talks about frogs? There were frogs that were loosed in Egypt at the time of Moses and the Exodus. Read Exodus 8:1-12 with your student and try to imagine what that plague of frogs must have been like.

In the illustrations for *Grass Sandals* there are so many beautiful **mountains** that Basho sees on his journeys. (If you happen to own a Strong's Concordance turn to the section on the word "mountain" and let your student see, at a glance, how many passages there are in the Bible that have the word mountain in them! These passages won't all be appropriate for your student, but just seeing how many there are is amazing.) Has your

student ever thought about the famous mountains of the Bible? There is the mountain called Ararat in Genesis 8:4-5 where Noah's ark came to rest after the Flood. Mt. Sinai is the place where Moses received the Ten Commandments. You can read about this in Exodus 19:23. Mount Carmel is named many times and associated with the prophet Elijah. 2 Kings 18. The Isaiah passage 52:7 is the one about how beautiful on the mountains are the feet of one who brings good news. In Mark 6:46 you can read about Jesus going up on a mountainside to pray and there is the Mount of Olives in Luke 2:39 where Jesus prayed, as well. There is also an interesting passage in John 4:20 that tells us that someday believers won't worship at any particular mountain but rather they will worship in Spirit and Truth! Encourage your student to watch for other interesting mountain names and events as he reads his Bible.

Genesis 8:4-5

Exodus 19:23
2 Kings 18
Isaiah 52:7

Mark 6:46

Luke 2:39
John 4:20

Another topic you can explore with your student that ties into the story *Grass Sandals* is **friendship**. Basho certainly had friends and enjoyed meeting people and making new friends. Some of the well known verses in the Bible about friendship are Proverbs 17:17a about a friend loving at all times, Proverbs 18:24b that talks about a friend who sticks closer than a brother, and the verse in John 15:13 about there is no greater love than when a many lays down his life for his friends. Discuss with your student the different ways (as well as literally) that we might lay down our lives for our friends. The story of Jonathan and David portrays a strong friendship. You can read about them in 1 Samuel 20:42. If you remember the song "Make New Friends" you could sing it with your student in a round. The words are: "Make new friends, but keep the old. One is silver and the other gold."

Proverbs 17:17a
Proverbs 18:24b

John 15:13

1 Samuel 20:42

This might be an interesting time to introduce **Job and his friends**. Just tell the story briefly, something like this: "Someday you will read a story about a man who had many misfortunes (sad things happen to him, including his own sickness). His friends gathered around, but they said many things that weren't very helpful to him, and didn't help him to feel better or loved." From this story has come the common saying of being "like Job's friends" when we are not very helpful to someone who is hurting. You can use this opportunity to discuss how we talk might talk with people who are suffering. Normally we don't try to offer reasons why something has happened to someone, or even what good we think might come of it. We just say we are so sorry and that we love them a lot. Sometimes, if a

person is extremely sad we can just sit with them and it's ok if we are quiet—we don't really need to say anything at all.

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Acts 16:11-15

John 6:9

Isn't it wonderful how the people in *Grass Sandals* **share** with Basho as he travels? A farmer gives him a radish and a woman offers to share her noodles, while a man lends him a horse as well. Read the story of Lydia in Acts 16:11-15. Lydia, filled with the love of the Lord shares what she has. Sharing also reminds us of the story of the boy who shares his loaves of bread and fish with Jesus. That story is found in John 6:9. Does your student think that Basho would share whatever he had with strangers and friends that would travel by his own home by the banana tree? We don't know whether or not Basho knew Jesus, but Basho did enjoy things around him and he did share with his friends.

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James 1:17

Matthew 2:11
Proverbs 18:16

One day Basho's friend gave him a gift of some sandals with blue laces. For this story, a good tie-in for Bible ideas would be gift giving. There are various places in the Bible that talk **about gifts and gift giving**. James 1:17 speaks of every good gift as coming down from the Father. There was God's greatest gift (Jesus) given at Christmas and fully realized on the morning of the Resurrection! There were the gifts of the wise men found in Matthew 2:11. And remember, a man's gift will make room for him! Proverbs 18:16

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Philippians 4:11-12

Proverbs 15:17

In *Grass Sandals* Basho sits and looks over the **mountains** (at beginning of the story). He also sleeps on flowers or where fleas nipped him Whether Basho is in a leaky hut or whether he's enjoying the taste of his morning tea, with whatever he finds or is given—he seems to be happy. This reminds us of the verse found in Philippians 4: 11-12 where Paul says that in all things he has **learned to be content**. Basho lives simply, eats simply and really enjoys everything around him. Proverbs 15:17 says that it is better to eat simple vegetables with happiness than to have the luxury of a fatted calf but with hatred. You can discuss with your student that whether you are eating a feast or a very simple meal, it is the love and kindness in the family that really makes the meal taste best!

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Remind your student that *Grass Sandals* is all about the life of the famous Japanese poet Basho. Does your student know that there are five books in the Bible that are considered poetic works? He may be able to guess Psalms, but also there are Job, Proverbs, Ecclesiastes, and the Song of Songs (or Solomon). These wonderful **books of poetry** were written long before the days of Basho.

The Psalms
Job
The Proverbs
Ecclesiastes
Song of Solomon

RECIPES FOR TRAVELING POETS WITH LOTS OF FRIENDS

What do you do with left over rice? This recipe for Rice Balls made with sticky rice is a wonderful solution to left over rice, or you can use rice that you've just prepared. The rice balls are eaten cold with the delicious stir fry that is hot and colorful. As your family enjoys these recipes, maybe they will want to write a poem about their dinner.

Chef's Corner: "Sticky rice" is actually a very short grained rice. You may be able to find it at your grocery store and you will certainly find it in any Oriental market store. It is the rice used to make shushi and other Japanese food delicacies. Decorate for dining with an Oriental theme. Then plate your stir fry with some surrounding rice balls and try using chopsticks for added fun. Don't forget to try a pot of Green Tea with your meal.

Rice Balls

2 cups chicken stock
1 cup short grained rice (often called "sticky" rice)
2 scallions (green onions), finely diced

Put the chicken stock and the rice in a medium saucepan over high heat. Bring to a boil, reduce to low, cover and simmer for 20 minutes (or until liquid is absorbed and rice is tender.) Stir in diced scallions and cool the mixture. With your hands, form the cooled rice mixture into 2" diameter balls. Cover tightly and chill.

Vegetable Stir-Fry

1 red Bell pepper, cut in thin strips.
1 carrot, cut in very thin strips or cross-sections.
1 celery stalk, cut in thin cross-sections.
1/2 head of bok choy, washed and cut in thin cross-sections.
3 scallions (green onions), cut in one- or two-inch sections.
1/2 pound fresh snow peas, whole.
1/2 yellow onion, coarsely chopped
1/2 head of broccoli, cut into small florets
1 can of bamboo shoots
1 can of water chestnuts
1 can of baby corn

Prepare the vegetables for cooking. If you cook two or more together, group them for similar cooking times. Canned items only need to be heated up.

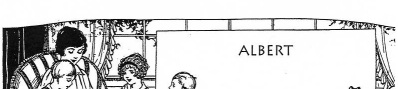
2-3 tablespoons black bean sauce
1 one inch section of fresh ginger root (peeled and grated)
2 cloves fresh garlic, minced
1 tablespoon of rice wine vinegar.
2 tablespoons of plum sauce.
1 teaspoon of sesame oil.
1 teaspoon soy sauce (Kikkoman is truly an excellent brand and very easy to find!)

(Creating a delicious stir fry sauce is an art! It takes diligence, a lot of practice and a flexible attitude.)

Mix all of the sauce ingredients together. Set aside.

Heat oil over high heat (peanut oil is recommended because of its high smoking point) in a large skillet or wok. The oil is ready when a drop of water pops and turns to steam upon contact. Carefully add the vegetables in one at a time, cooking them in individual batches. Each vegetable should only take 1 minute. If you need to add additional oil between vegetables you can, but do so sparingly. The vegetables should be cooked but still slightly crisp. When all the vegetables have been cooked, you can pour the sauce mixture into the wok. Let it simmer for 1 minute, add all the vegetables back to the wok and stir. Serve immediately.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.



Title:	Albert
Author:	Donna Jo Napoli
Illustrator:	Jim LaMarche
Copyright:	2001
Summary:	Albert finds himself out on a limb, but ends up enjoying the ride.

Social Studies: City Living

This story doesn't have a specific geographic locality. It takes place in a city. We know that it must be a fairly large city with sidewalk vendors like those found in New York City, as well as tall apartment buildings. This story also takes place in a location within the bird range of Cardinals. Put your story disk on a large city in an area where Cardinals live. (Check a bird guide and a map of their territory to discover where this might be. From this exercise your student will become familiar with yet another resource book [a Field Guide to Birds] in which he can find answers to questions he has.)

Talk about apartment living with your student. Many families share a single building and you can sometimes hear people and noises above or below you or in the hallways. There may be bars on upper windows so people don't fall out. These apartment windows can be many floors up and it would be easy to push through a window screen and fall. Apartments may also have large awnings, fire escapes, staircases or elevators, central laundry units, inside garages, etc.

If you can, visit an apartment complex. See how many of these things your student can find, and write down other observations you make as you visit.

Make an apartment complex out of a large shoebox. Put in floors, halls and rooms and let your student decorate the complex any way he wishes. Talk together and imagine what it would be like to live in an apartment if he has never had this experience before.

The story *Albert* mentions a lady selling flowers (like a sidewalk vendor) and someone selling Golden Bean Cakes, again probably a sidewalk vendor. If your student has never seen such vendors explain that like a man standing on the corner with a pushcart of ice cream cones to sell to anyone who passes by, vendors sell all sorts of things on city sidewalks. They probably have to have permits from the city to be at the locations where they sell. They may also have to meet other requirements (especially city health requirements if there is food involved.) Look for examples of sidewalk vendors in stories that you

read and point them out to your students. There is a very interesting book for your older grade level student called *The Pushcart War* by Jean Merrill.

Through this introduction, your student will recognize many other types of "vendor" characters and scenes in books, movies and plays.

Language Arts: Discovering the Truth

Discuss with your student what kept Albert from going outside? Your student may say it was the weather and you can agree with him, but gently probe a bit deeper. Re-read each section that talks about the weather being too damp, or too hot, etc. Now, notice what occurs just before each test of the weather. Each time Albert decides the weather is not right, he has just heard a noise that he considers "not a good noise". Now ask again. What really kept Albert indoors? Albert didn't like anything (especially noise) that wasn't "good." The weather was just sort of a—what? An excuse! It is good to be able to see through our excuses and know what it is that really bothers us. That way we can deal directly with the situation.

Can your student think of a time when he has not wanted to do something or has been afraid to do something and rather than say so, he offered an excuse? Do you have any of your own examples to share with him?

Now re-read the part of the story where Albert protects the baby birds from the cat. What kind of a noise does Albert make to scare the cat away? (Screech!) If Albert had heard someone else make that same noise as he was looking through his window, would he have considered it a good noise or a bad noise? You see, in this case it was good because it protected the birds. In the same way, many noises can be considered either bad or good depending on the circumstances. In either case, all these noises are a part of the world we live in.

Social Studies: Character Relationships - Fears That Rob Us

Albert was afraid to go outside and for a long time he allowed his fears to control his actions. All the time that Albert stayed closed up indoors he was missing the wonderful life that was going on right outside on his own sidewalk! Talk with your student about fears. There are some fears that are legitimate and help us steer clear of truly dangerous situations—as a normal fear of (or respect for) fire. However, so many times the fears we have are actually groundless and these are the fears that rob us of so much of life's joy. Work together to come up with a system to help your student evaluate his fears and help him find out which ones need to be addressed and which ones are groundless. Fears are often best dealt with by finding out the truth just like Albert did!

Social Studies: Character Relationship - Compassion

Once your student has passed his amazement at the somewhat tall tale of a man holding a nest in his hand for several weeks, you might talk about the fact that these days so many people don't pay much attention to wildlife. Perhaps it is because so much of the wonder of life is missing, or maybe that people are too busy with their own pursuits to enjoy and care for wildlife. A person who has learned to be in awe of creatures

from tiny ants to soaring eagles is usually a happier person. This kind of person is one who often will sacrifice in some way—spending money for birdseed, or a bird bath, or caring enough to make the call to a nature center on behalf of an injured wild animal. Albert shows the reader, in an admittedly stretched (if not tall) tale scenario, the character of someone who really does care about wild creatures.

Language Arts: The Comics

Did your student enjoy the fact that Albert reads the comics? Comics are a series of cartoon boxes that tell a story. They may tell this story entirely in one comic strip or the story may be ongoing with many adventures over weeks, months or even years. Some may even end each week in a cliff-hanger. The first comic strips appeared in newspapers in the early 1900's and they are still featured in newspapers, magazines and comic books today. Many of the original comic strips were humorous, thus they became known also as "the funnies."

As a genre, comic strips include both writing and art. Most often one person both writes and draws the work.

Have your student try making a box comic strip with one or more squares and then writing and illustrating his own comics, or you can work on one together. Obviously the number of boxes will be determined by how many your student needs to complete his idea.

Language Arts: List Making

What kinds of things did Albert do to keep busy? Make a list. What kinds of things does your student like to do to keep himself busy? Make another list. As the teacher, you could also make a list of the things you like to do and then compare your list with your student's.

Language Arts: Postcard

If your student does not know what a postcard is, purchase some and show them to him. You could get a picture (tourist) postcard and perhaps a blank one from the post office. Explain that you can send a quick note on a post card for less money than it takes to mail a letter. Find out the difference in the two prices.

Have your student write a postcard to a friend or relative. Show him where the message goes and where the address should be placed. Then, unlike Albert, who never sent his cards, your student can actually take joy in going outside and posting it!

Language Arts: Imagination

At first, when Albert heard the airplane roar he was afraid of the loud noise. But because he had to stay at the window, he began to think of the places an airplane might go. Where does your student think the airplane might be going. If he has lots of ideas let him make a list. Now ask him where he would like to go. Many times the answer will be different because your student wasn't thinking specifically of what he would like. If he

has lots of answers let him make another list. Again, if you care to, you could make a list of where *you* would like to go and compare your list with that of your student.

Language Arts: Subtle Symbolism

Your student may be too young to make much of this lesson, however, you can mention it in passing and see if the concepts are understood.

Discuss with your student the fact that Albert was afraid to go outside. He was afraid of the "not good" noises that he heard and of what they might mean. When a person is afraid in this way, it is like they put themselves in a little jail. Symbolically these fearful people seem to look out from between the bars (just like Albert actually did at his window) and they cannot seem to get out. With your student, look at all the illustrations of Albert and his window. Choose the one you think looks most like he is in a jail cell.

After being forced to spend enough time at the window to understand that all the noises were part of his wonderful world Albert became freed from his fears and was happy to go outside his self-imposed jail. The illustration of him flying in the swing like a bird, is symbolic of this new found freedom. We often talk about flying "free like a bird" and Albert was happy doing so!

Language Arts: Suspension of Reality

[**Teacher's Note:** This is a lesson to discuss with your student ONLY if the subject comes up in questions and conversation. Children are quite able to happily suspend reality to enjoy a good story and it would be something of an insult to this happy childhood ability if in the name of academics this became an intrusive lesson. However, some students have an extremely practical nature and they insist on answers. If your student is one of these, this lesson could be useful.]

Albert puts his hand out the window and a bird begins to build her nest on his palm. The bird parents raise their bird family over a three week period. Eventually the birds begin to feed Albert. During all this time Albert stands at the window.

Your student may wonder about Albert's ability to stand up for so long, to sleep standing up, and about other functions that would not be possible with his arm permanently stuck out the window. Discuss with your student how sometimes authors set aside "how things would *really* work" for an imaginative story line that could not actually happen otherwise. This type of imaginative event can sometimes be used for the background of a special story.

Countless childhood stories are written in this manner. In some, animals are dressed like people and talk or have emotions. In others like *Cloudy with a Chance of Meatballs* by Judi Barrett, the grandfather who is fixing pancakes tells a story that completely suspends reality where there is a land that rains down various types of food. Wonderful stories are written with parts that are real mixed with parts that are not believable. In these stories it is always fun to pretend that just possibly the unbelievable parts could happen. *Albert* is one of these stories.

In Napoli's story *Albert*, the author, in the interest of making her point, suspends reality. The point of the story is not Albert's ability to perform this super-human feat of standing with his arm out the window for weeks. Rather the point of the story is the fact that being forced to stand at the window *changes* Albert's view of the world. Standing at the window takes Albert out of his comfort zone—and he is changed!

An older student might enjoy writing a similar type story where reality is suspended for the good of the story's message.

Art: Music

Albert's birds make their nest in the spring. This is a wonderful opportunity to play Antonio Vivaldi's famous composition *The Four Seasons*. Particularly the "Spring" portion of this work would tie in to the story of *Albert*.

Also, Albert whistles at the fledgling. You might want to try whistling and have your student try. If you can both whistle try a duet! There is a song, made famous by the movie, *Snow White*, called "Whistle While You Work." If your student doesn't know this song, he might enjoy learning the words and music and thinking about Albert whistling as he encouraged the young bird. You can find this song at your library and bookstores, on CD's and tapes featuring the songs of the Disney movies.

Art: Artist's Medium and Watercolor Papers

Jim LaMarche's beautiful illustrations for the story *Albert* are executed in colored pencils on watercolor paper. If your student is showing interest in illustrating his own work, drawing in a nature journal, or pursuing other artistic efforts, it might be time to visit an art store or a large chain hobby store that carries art supplies. With your student look at the different types of colored pencils and buy the best set you can afford. Prismacolor™ makes an excellent pencil and comes in sets of many sizes. Since colored pencils are not as easy to mix as paints (you can blend, but not exactly mix), the larger the set the more variety the student has for his work. Perhaps he could receive a good set of pencils for a birthday, etc. There are also excellent sets of colored pencils that you can use with some water to make a blend of colored pencil technique and watercolor technique. You might want to try a small set of those as well. When you have finished looking over the colored pencils, let your student see the variety of watercolor papers on the market. There are some that are smooth and some that have a great deal of texture to them. Jim LaMarche has used a watercolor paper with texture for his illustrations for Albert, so that in those pictures the student can see pencil marks as wells as texture marks from the paper. Perhaps you can purchase a sheet or two of textured watercolor paper for you student to experiment with.

Art: Sculpture and Painting Project

Find a nest or purchase one at the craft store and then let your student make Cardinal eggs. Your student can research the size, shape, color, etc. and model them from Crayola Model Magic® which will harden in the air. When dry and hard these eggs can be painted in Cardinal colors with the spots and marks added. Display your student's

work (eggs in the nest) on a forked twig in a bookcase or on a tabletop. (Your student can also examine the illustration on the back dust jacket of Albert.)

Art: Illustrations - Progressive Details

As your student's ability to observe details grows increasingly better, he will begin to notice whether or not a book's illustrations are consistent with the story and with the other illustrations themselves. In *Albert* there are at least two good examples of these types of consistent illustrations. Look with your student at the windowsill where Albert stands for so long. There is a little vine-type plant sitting there. As the story progresses the vine grows! You can tell that it is taller in the pictures that follow the first time you see it.

In the same way, Albert's beard grows! At the beginning of the story he is clean shaven and time goes by while he is standing at the window, each successive picture shows more beard!

These are the kinds of details that good artists think about when they do the illustrations for books. Maybe your student would like to write a short story and illustrate it with progressive details just like Jim LaMarche does in *Albert*. A story of a garden, from the first plowing to the harvesting of the crops would be a wonderful vehicle for this type of illustration. Can you think of other story lines that would be good? (A child growing up? Even a story set with a background of washing the dishes would look better if the illustrations showed a full sink of sudsy dishes and then later a picture of the water draining away, etc.)

Art: Nature Journaling

The story of Albert is a wonderful springboard for thinking about beginning a serious nature journal. (**Teacher's Note:** Maybe the best book ever written to encourage nature journaling is *Pocketful of Pinecones* by Karen Andreola. This is a relatively new book and should be easily available. It will become your favorite as a teacher of journaling, a teacher of nature, and a nurturer of children!)

A nature journal will be a valuable learning tool for your student as long as he is in school but don't be surprised if he keeps a nature journal even as an adult!

See "Art: Learning to Draw" in lesson plans for *The Raft* for additional books.

Art: Cooking - Golden Bean Cake-Asian Origin

There are actually at least two different types of food called Golden Bean Cakes. One is a fried bean cake with a meat filling, eaten with chili sauce and the other is a sweet dessert made with crushed beans. If you are interested, use the Internet (at the library if necessary) and type in "Golden Bean Cake" to find recipes for each. You can also inquire about Golden Bean Cakes at an Asian food market or look for recipes in Asian cookbooks.

Art: Pantomime

Albert watched many people from his window. Sometimes he could hear noises (he knew for instance that the people were arguing but he couldn't hear the exact words). Much of what Albert witnessed was in the form of pantomime. A pantomime is when someone performs pretend actions without words. Use this story as an opportunity to introduce pantomime to your student. Explain how it relates to the story (that Albert could often see, but not hear everything) and then allow your student the time to try acting out in pantomime some of the scenarios both from the story and those which he makes up on his own.

Pantomime is a form of entertainment that consists of acting without words. The word comes from the word "mimic" and is often shortened to "mime," when speaking of the actors or of their performance. The acting usually tells a story and may or may not be accompanied by music. Because the acting does not use words or sounds, it must be exaggerated in movement and expression so the audience can understand what is going on.

Suggest that you and your student act out, in pantomime, the scene in *Albert* where he views the couple on the street arguing. Talk out the scene: You each pretend to come out of a building, yelling at each other, and eventually turning your backs on each other and walking off offended. (What would that look like in pantomime without making any actual sounds? You could use excited, erratic hand gestures, along with wide open mouths and extremely angry facial expressions. Then make a large, quick turn as you walk away and angry walk, feet stomping, etc. Feel free to add or subtract any of these ideas and create your own interpretation of the feud.)

Next, talk out the reunion of these two people: With pretend packages they meet, laugh, hug and you are free to add anything else to the story. Again, all the actions will be large and expressive. There is little subtlety in pantomime! After you have tried these scenarios, find others in the story* or make up your own and enjoy this form of entertainment and expression as much as you'd like. If you feel comfortable doing so, invite a small audience and see if they can understand what is happening in the quiet little scenes being performed.

For extra interest see if you can find some videos at your library of famous mimes and their work. Watching these films might give your creative student some extra ideas for improving his own performances. Perhaps the most famous mime of all is Marcel Marceau. There are also great scenes of Charlie Chaplin miming in silent movies.

*Have your young student act out the scenario of being in an egg, hatching, being fed and fledging. Your older student could pretend to be the proud parent bird. Can someone who is not in on the pantomime rehearsal tell the story that is being acted out?

[**Teacher's Note:** For your own information, pantomime is more popular in Great Britain and is often associated with seasonal performances there. In England you will hear people saying that they are practicing for an upcoming panto. This is their shortened or slang form of the word pantomime.]

Math: Divisions of Time

Remember Donna Jo Napoli, the author of *Albert*, uses the words morning, midday and night in her story? Can you find these words with your student? On a sheet of paper, list activities that your student thinks of as morning, midday and night activities. Now, assign approximate times of day for these activities. For instance: Hearing the morning paper hit the sidewalk 7:00 am; lunch 11:30 am; nap time 1:00 P.M., bedtime 9:00 P.M.. This is just an exercise in using hours of the day and time on the clock to mark certain daily events. You can also discuss the term *midday* that is derived and shortened from the phrase "middle of the day."

If you have not discussed that an hour consists of sixty minutes or minutes consists of sixty seconds each, you can do this as well With an older student you can also figure the number of hours in a day, week, month, etc.

Ask your student why he thinks people use such terms as morning, noon (midday) night and why they bother to divide the day into hours? (It isn't just so there will be more to learn! Maybe he will come up with the idea on his own that we use such divisions to help us communicate when certain things happen. If someone says that their mail is delivered about lunch time we understand that it comes about noon, not in the morning or the evening. When we want to meet someone we can give a certain time and if each party is looking at a clock or watch they can meet together without a lot of guessing or waiting.)

There is also a saying that might be interesting to your student. Some people describe something as being 24-7. Can your student figure out what that means? If a person said that you could call them anytime—twenty-four/seven—they mean you could call them any hour of the day (twenty-four hours) and any time during the week (seven days a week). In other words they really do mean *any time*! This common saying is used in many different applications.

Math: Learning to Average

[**Teacher's Note:** This lesson requires the student have beginning knowledge of division.]

Let your student tackle the adventure of figuring the **average** number of weeks in the Cardinals nesting period. Have your student look at the *Five in a Row* Science Lesson for the Cardinal and add up the number of days to build a nest (between 2-9 days), number of days to lay the eggs (varies 2-6 depending on how many eggs), how long till the eggs hatch (12-13 days) and how long before they fledge or leave the nest (between 10 and 20+ days). For each of these categories he will have to calculate and then add the average figure.

For instance, to figure the average number of eggs let him add 2 + 3 + 4 + 5 + 6 together because the number of eggs listed 2-6. He will add these and find the total is 21. Then have him count the number of entries he added (5) and divide 5 into 21. The average number of eggs laid is then 4. He might be able to tell just by looking that the average days until fledging 10-20, is 15. If not, let him do the computations. Also do the aver-

age for the length of time it takes to build a nest. When he has all the averages let him add them up to find the average number of days it takes a Cardinal to build, lay and raise a brood. (The number should be 36 or 37. This is an average! Some birds will take a longer time and some a shorter time raising their broods.)

Remind your student once again the reason he is finding an average is because the same type of bird will behave differently under different conditions, and your student is just seeking to know what the *average* for any Cardinal might be.

Math: Mathematics in Baseball

Albert listened to baseball games when he was in his apartment. Does your student know that there is a great deal of math connected with the game of baseball? There are all the dimensions of the playing field, for instance, 60 feet 6 inches from the pitcher's rubber to home plate. There are exact dimensions for the batter's box and for the distance between the coach's box to the base lines. If your student is interested, let him look up **baseball** in *The World Book Encyclopedia* and see for himself all the interesting measurements.

The sport of baseball itself is filled with an area of mathematics known as statistics. Many different baseball skills are categorized or averaged such as batting averages, stolen bases, strike outs, earned run averages, slugging percentages, etc. This is a whole sub-study in itself for your student.

Outs are counted at the rate of three per inning. This is a great opportunity to work on "counting by threes." And, in baseball the number of balls and strikes are also recorded and entered into the statistical record as well. Any student interested in finding out for himself the amazing world of baseball math will be well rewarded with rich discoveries!

Math: Altitude and Speed

Albert listened to the roar of a plane when he was standing at his window. The plane was up in the sky and was moving along at a certain speed. Does your student have any curiosity about how high (at what *altitude*) most commercial airline planes fly? Obviously these planes take off from the ground and spend some time reaching their cruising altitude. Cruising altitude for most commercial jet airliners is between 30,000 and 37,000 feet. Smaller private propeller planes might fly anywhere from 1000 to 15,000 feet above the earth's surface. How fast does a jet airliner travel? Cruising speeds range from 400 to 600 mph. Small private propeller driven planes fly at anywhere from 75 to 200 mph.

Speeds are also measured in 'knots.' Ask your student if he knows what a 'knot' is. A 'knot" is equal to one nautical mile, or about 1.15 statue miles. So a plane traveling at 100 'knots' would be traveling at about 115 mph. How fast would a plane traveling 350 knots be traveling? How many knots is a plane traveling when it's flying at 450 mph?

Science: Tomatoes and Tomato Juice

[**Teacher's Note:** This is another long lesson. Use only as much information as will intrigue your student. Some of the technical facts were added as a point of observation, not for memorization. For instance, the details about botanists vs. horticulturists are included just so your student can see that there are various ways to group objects. Just as your student could group small model cars in more than one way—by color, then number of doors, or even by the use of vehicles—trucks, cars, etc. In the same way, tomatoes can also be a part of different groups or categories!]

Remind your student that Albert sits at the table and drinks tomato juice as he listens to the morning noises. Has your student ever had tomato juice for breakfast? If possible have a tomato handy to examine as you present a few facts about this common food.

A tomato is a highly nutritious food that contains vitamins (A, C, E, etc.) and minerals, as well as other important nutrients. Your older student may enjoy looking up tomatoes in a nutrition (calorie or carbohydrate count) book and listing vitamins, carbohydrates, sugar, fat contents, etc. You can also find that information by typing tomato nutrition on Internet search engines. Most tomatoes are also a highly acidic food, though some varieties have been cultivated to have less acid content.

Tomatoes are grown commercially on large farms as well as avidly by home gardeners. They come in multitudes of sizes (from grape size to those weighing well over two pounds) and in various colors, orange, red, yellow, etc. Take your student to a farmer's market or a grocery store with a large produce section and let him find all the varieties of tomatoes he can. Often there will be grape, cherry, plum, and cluster tomatoes as well as the more common garden varieties. If your student can look through a good seed catalog he will be surprised at the large variety of tomato seeds which are available.

Tomatoes are considered both a fruit and a vegetable. It just depends on whether one is speaking with a botanist (definitely a fruit) or a horticulturist (definitely a vegetable). Botanists are concerned with grouping plants by how a plant is formed—plant parts, and how they grow—their life cycle. A horticulturist is concerned with how plants are propagated and raised or farmed. When speaking of tomatoes, a botanist will say that a tomato is a fruit because the flesh of the tomato encloses the seeds. (In the same way, cucumbers, squash, pumpkins, green peppers would also be considered fruits.) However, the horticulturist would say that a fruit grows on woody stemmed plants or plants that are *not* replanted each year, like strawberry plants. To a horticultural scientist, fruit would be that which grows on trees or shrubs, like blueberries, cherries, pears, apples, etc., and strawberries which are perennial plants.

Isn't it interesting that different areas of science will group the same plant differently? Probably if one spoke to a chef he would say that certain foods such as fruits are used primarily for desserts while others are always eaten with the meal—vegetables! That would put the tomato back into the vegetable category. Tomatoes provide a main ingredient to many of the condiments that we use in cooking. Your student may not realize that tomatoes form the base of catsup, salsas, tomato sauce, tomato paste, pizza sauce, spaghetti sauces, and some salad dressings. And there is always tomato soup!

[**Teacher's Note:** Just for your own information: A further interesting fact about tomatoes, is that the United States government in the late 1800's officially declared the tomato a vegetable for the purpose of tariffs on imports. However, it doesn't change at all the minds of botanists who still maintain that a tomato is a fruit! If you have upper grade level students they might enjoy researching the two sides of the *"tomato—fruit or vegetable?"* question and having a debate over the proper category of a tomato.]

Perhaps now is the time to try some tomato juice. If you have never tried home-made tomato juice, it is a delight compared to any canned or store bottled product. Sometimes, too, when a student helps with the project, he is more likely to enjoy the results. So, here is a recipe for you and your student to make your own tomato juice. Be sure to serve it well chilled:

Crockpot Tomato Juice

10 large tomatoes
1 teaspoon salt
1 teaspoon seasoned salt
1/4 teaspoon pepper
1 tablespoon sugar

Wash and drain tomatoes. Remove the core and the blossom ends. Place the tomatoes in a slow-cooking crockpot. Cover and cook on low 4 to 6 hours or until tomatoes are done. Press through sieve or food mill. Add seasonings; chill well and stir before serving. Keep refrigerated for up to three days. Think of Albert as you enjoy your tomato juice.

Science: Noise

Remind your student of the plane that roared, the one Albert thinks is not a good noise. Ask your student for his own definition of noise.

Noise is actually a sound where you don't want it to be. (It's sort of like the definition of a weed, which is a plant that is where you don't want it to be. An apple tree in a wheat field might be considered a weed!) So, a sound that is irritating might be considered by some to be a noise and by others to be pleasant. Some people enjoy the droning sound of a fan while they go to sleep while others think it noisy and prefer the quiet.

On the other hand there are sounds which have such a high pitch or loud volume that it actually hurts the ear. Most people would consider these sounds noise. So there is both an aspect of personally irritating sounds as well as those sounds which actually cause pain to the ear. Both are considered noise.

Sound pressure is measured in decibels designated by the symbol dB with 10 dB being sounds that the human ear can hardly hear and 70 or 80 dB being what most people would consider noisy. A loud live rock concert might be in excess of 140dB!.This kind of noise (because it is in the form of music generally considered enjoyable) is not as easily noticeable in causing hearing loss. The range of 90+ dB is great enough to cause hearing loss if there is long enough exposure. The reduction in hearing often comes slowly and

after long periods of exposure and is caused by the hearing nerves being damaged. Concert goers and people who listen to loud music on a regular basis, as well as those who use loud equipment or work in noisy factories can take precautions by wearing protective hearing devices. (**Teacher's Note:** Aging also has an effect in the reduction of hearing, as does disease and injury.)

With housing developments built near airports, apartments situated near crowded city traffic, and louder industrial and construction types of equipment being used, noise pollution has become a problem to be dealt with in cities. Your student might enjoy researching this topic and finding out the latest solutions to helping this problem. He can use the library for books and research materials or perhaps find facts on the Internet.

Your student will be interested in looking at these decibel levels for common sounds listed by the Canadian Hearing Society:

Thunderclap or ambulance siren 120 dB
Football game at a stadium or a movie in a theatre 117 dB
Leaf blower, rock music band, or busy video arcade 110 dB
Motorcycle, jet boats/personal water craft 95 dB
Lawnmower, many industrial workplaces, noisy restaurant 85 dB
Average city traffic noise 80 dB
Vacuum cleaner, sewing machine, hairdryer 70 dB
Normal conversation 60 dB
Whisper 30 dB

Now list the descriptive words for the kinds of noises that Albert heard: Clatter, bark, giggle, rumble, sing, shout, laugh, argue, a radio, whistle, chatter, chirp, plane's roar, yell, screech, chuckle, peep, and a siren, and talk about the decibel level you think each might be.

Then listen carefully and list all the sounds your student can hear in three or four minute's time. He'll really have to concentrate to hear the tiny sounds around him. Think about the difference in this list if he is outdoors or indoors, and the differences at different times of the day or night.

Science: Weather and the Spring Season

The weather mentioned in the story *Albert* includes cold weather, damp weather and breezy weather. Ask your student when birds build their nests and lay their eggs? In what season of the year does this usually happen? (This happens mostly in the spring, and sometimes on into summer.) Ask your student what he knows about springtime weather? (He may say that it is sometimes warm and sometimes cold. He may also say that the spring season can be a very breezy or windy season and that it is often rainy or damp.) It sounds as though Albert's birds built their nest in the spring and that whether Albert liked it or not, the weather was most typical for that season of the year!

Since there are many different areas of climate, sit down with your student and make a chart of the four seasons (or whatever seasons you experience) and write down the typical weather patterns for each season in the area where your student lives.

Science: Berries

Since the birds fed Albert berries, take this opportunity to explore these delicious small fruits.

Make a list of as many kinds of berries as you know (remember *Duchess Bakes a Cake*? There were many berries listed in that story! Are they all real? "Bilberries, gooseberries, cranberries, bogberries, blackberries, mulberries, burberries, dogberries"... and then don't forget to add raspberries, blueberries, loganberries and there are surely more! Ah, your student remembered! Strawberries!)

Since the birds feed Albert blackberries, find some fresh or frozen berries to examine. Let your student look at the small fruit, feel it and even dissect it to see how the parts fit together and what it looks like inside. Because blackberries can stain fingers and clothing you could have aprons or smocks ready to protect garments, and even thin flexible plastic gloves might be helpful.

After your student has examined the fruit, written about it and drawn its shape, let him taste it. You may want to provide a bowl of berries and a dollop of whipped cream or yogurt for a treat after the lesson. While he is enjoying the berries (or some blackberry jam on bread) explain to him how a blackberry grows on a bush. Birds often eat berries and drop the digested seeds over the ground. Some of these seeds germinate and grow where there are favorable conditions. Blackberries grow where they can enjoy a light soil with humus that holds the moisture, protection from fierce summer afternoon sun, and while they need good amounts of moisture they do not tolerate standing water or swampy areas. The berries grow on bushes or on canes (or brambles) which have thorns, and they have an oval serrated leaf. In many areas of the United States and Canada you can take your student for a walk in the country along wooded areas and find wild blackberries growing. There are also small fruit farms where you may go to pick your own blackberries.

(**Teacher's Side Note:** Albert eventually ate some insects as well. There are many countries of the world where insects are commonly eaten and enjoyed. Insects provide protein and nutrients. Some insects that are most popular for food include grasshoppers, ants, grubs and worms of certain varieties.)

Science: Zoology - Cardinal

[**Teacher's Note:** For your seven or eight year old *Five in a Row* student you may be able to enjoy this lesson together. If you have a four to six year old you may want to skip the "research can yield various answers" part of the lesson and just pick *one of the sets of facts* from each area (as a sort of average) to present. This will be far less confusing to a younger student and keep his lesson time enjoyable!]

Cardinalis cardinalis is the scientific name for the familiar red bird from the story *Albert*. There is a great deal of information on the Internet including diagrams and color pages of cardinals. In fact, should your student do some research on these birds, he will discover an extremely important concept—never assume that any one source has all the information available on a topic! In other words, your student will learn that good research means reading the observations and opinions of many sources and synthesizing that information into usable facts for his particular project.

Based on locality and other factors there are numerous conflicting facts for almost every single aspect of the life of a cardinal. The same species of bird in different climate areas may nest more or fewer times in a season. These birds may build nests in different kinds of trees or shrubs based on what is available in that locality and they may eat different kinds of foods, or build their nest with different kinds of materials—again based on what is available, etc. The important lesson here is to learn that the information in bird field guides is **approximate** and when watching birds, to be ready for slight variations in the information based on these different factors.

For instance, in researching the number of days a female cardinal takes to build her nest, there are sources that say 2 to 5 days, or 4 to 6 days while other sources lengthen the time span and say 3 to 9 days. These nests are built from 3 to 20 feet above the ground (most are 3 to 8 feet above ground) in shrubs or bushes or trees. The female building the nest makes a cup shaped impression in the center with her body and lines the nest in hair, grasses, bark, etc.

Some books say that eggs are laid in a **clutch** of 2 to 4 eggs, while others say 2 to 5 oval eggs are laid. (These eggs are laid one per day until the clutch is complete and then **incubation** begins.) Incubation lasts 12 or 13 days.)

Your student may find information that says cardinals raise 2-3 families a year, some say four, while you can also find that the young **fledge** (or leave the nest and begin to fly) in 9 to 10 days, 11 days, or 21 to 28 days! In most cases both parents feed the young until they fledge unless the female is sitting on a new clutch of eggs at a new nest, in which case the male does all the hunting and feeding.

One of the most interesting differences in the cardinal's life cycle is the color of the eggs! Statistics from different cardinal's nest observations indicate that egg color may range from white or gray spotted with brown, gray or purple specks, to buff or pale green eggs, speckled with brown or lilac; to glossy light green with reddish brown specks or blotches, or, in some cases, grayish, blue-ish or greenish white eggs with markings of brown, gray or purple. (The markings are deposited on the egg as the egg passes through the oviduct [in other words, as it is being laid].)

(**Teacher's Note**: *The World Book Encyclopedia* has many beautiful illustrations to help you explain different facets of the amazing world of birds.)

Science: Observing Birds

Mention that Albert was able to learn a great deal about Cardinals from his personal observations. There are many facts to know about this perky red bird.

Cardinals eat seeds, insects and fruit in the summer months, but are able to winter in areas that have no fruit or insects. This is because they have such strong beaks that they can still eat many hard-coated seeds even when other food is scarce. Their strong beaks act like nut crackers and allow them to get to the edible part of covered seeds. For this reason they are easily attracted to backyard bird feeders where they enjoy black-oil sunflower seeds, safflower seeds, peanut hearts and dried berries. Other types of birds that lack such a strong seed cracking bill as the Cardinal often have to migrate to more southerly climates where insects and fruit are found even during winter months.

Perhaps there is an area where you can set up a backyard bird feeder for your student's observation. There are many books on feeding wild birds that would provide you with helpful and interesting information. Your student will begin make obserations such as, "The Cardinals in my backyard seem to come to the feeder for one last meal about 30 minutes before the sun sets." There is no substitute for being able to watch and observe personally. In time add a pair of good binoculars to the viewing area for even better observation.

Another facet of observing birds, in general, that is both interesting and instructive for your student is discussing how birds differ. Why do some birds have extremely long legs such as herons, or sandpipers, or cranes? (These would belong to birds that frequent watery places. The long legs are usually for wading! A few species of birds have long legs that are used for running like an Ostrich or a Roadrunner.) Bird's legs, long and short, and even the way the feet are formed, help show whether a bird is a wader (herons, cranes, etc.), a bird that perches (robins, cardinals, blue jays, etc.), or a **raptor** with talons (such as an owl, hawk, eagle, etc.). Woodpeckers even have feet fashioned to help them cling to a tree without falling backwards!

Birds also have different **beaks**. Have your student think of the difference between a cardinal, a hummingbird, a duck or goose, and an eagle (with his powerful curved beak). Each of these birds has a different lifestyle and each eats different foods. The next time your student sees a bird in the wild, remind him to think about looking at the bird's beak and legs to see if he can guess the foods and habitats of the bird he is watching.

Other easily observable differences in birds are their size, body shape and color, their songs, their flight patterns, their nests, etc. For instance, learning to gauge the size of a bird accurately is a big help when your student consults a bird book to identify it. Was the bird he saw as big as a robin or bigger? As small as a sparrow or smaller? When he notices the color, was there yet another color at the throat or on top of the head or around the eyes? All these points will help identify the bird that was observed.

Finally, does your student know what the word preen means? What is a bird doing when it is preening its feathers? When a bird preens its feathers it is straightening them and often distributing body oil along the length of the feather as well. Find or buy a feather to have on hand for this lesson. Show your student how a feather can become

split apart and separated. Carefully smooth the feather between your fingers so that the feather bracts fit neatly together again. This movement is something like preening which a bird accomplishes mostly with his beak, and now and then, with a foot.

[**Teacher's Note:** If you have a small hand-held viewing microscope, have your student examine the feather and see how the bracts fit together. It is also interesting to note that *people* are sometimes accused of preening if they are spending a great deal of time fixing their hair, make-up, clothes or in general trying to "look good."]

Science: Radio

Remind your student that the story says Albert listened to the radio. He listened to baseball games. Does your student know how a radio works?

A radio works by means of transmitted radio waves that are measured by their frequency. There are many types of radio signals in use all around us, but the two we most commonly hear are "AM" and "FM". Other broadcast signals include garage door openers, baby monitors, cell phones, cordless phones, radio-controlled toys, television, ham radio, police and fire department radios, etc.

Radio stations on an FM radio (**F**requency **M**odulation) broadcast their signal at frequencies between 88 and 108 Megahertz. (Mega equals one million) So an FM radio station listed as "89.3" broadcasts it's signal by oscillating (vibrating) 89,300,000 times per second.

Stations found on an AM radio (**A**mplitude **M**odulation) broadcast their signals between 535 and 1,700 kilohertz. (Kilo means one thousand). So an AM radio station listed as "980" on your dial broadcasts it's signal by oscillating (vibrating) 980,000 times per second. It's amazing that Albert can hear the games because of all that oscillating!

Science: Plants with Vines

Albert had a plant growing on the windowsill near where he stood for such a long time. This plant was growing taller by winding itself around the bars *outside* Albert's window.

There are two kinds of plants that produce vines, those with woody stems and those with herbaceous stems. The little plant in the pot is an example of the kind with soft herbaceous (pronounced: her bA cious) stem while the kind that is growing up the wall outside Albert's home is the kind with thick woody stems.

Help your student begin a project of growing a member of the morning glory family: morning glory, moonflower, or sweet potato. These plants from the same family all have a soft, herbaceous (not woody) vine stem and tendrils that wrap around supports, which have to be provided, and allow the plant to grow upward. As the plant grows, have your student watch its progress and note interesting observations.

The following is just a touch of higher science, which may be interesting if you are making many observations of actual growing vines. If you pose the question and your student is interested, let him observe and research the direction of the growth of a plant's tendrils. Do they always grow in the same direction? What might influence this growth? Below are some categories for research. Which one of these might influence the growth direction of the vine and its tendrils?

Tropism is the **orientation of an organism toward or away from a stimulus**. Below are some various categories.

Hydrotropism-how a plant's roots grow toward water
(hydro- water)

Phototropism-how a plant grows toward or moves toward light or
(photo-light) the sun (Do experiments to prove this concept or observe the behavior of plants in a garden during the day a plant will rotate it's face toward the sun, etc,.)

Geotropism-how a plant grows influenced by the turning of the earth
(geo-earth) (this may affect the direction the tendrils of a vine grow)

[**Teacher's Note:** There will be some additional facts added to the information in this lesson when you study *Grass Sandals*. All of the above information needs to be presented in a creative, exploratory, interesting way, and shortened, amended or skipped altogether, if need be, depending on the age and interest of your student. These are not required ideas and concepts for the seven-eight year old age level, but they sometimes prove interesting as a short introduction when the topics arise from your student's *own* observations, such as, "I noticed the sunflowers this morning were facing the sun to the east and now they are facing the sun to the south? Why is that?"]

Science: Natural Enemies

While Albert is caring for his birds, he has to make scary noises to chase off a predatory cat. It seems as if cats have always been a bird's natural enemy. If your student is not familiar with that term, help him understand that in the animal kingdom there is what is called the food chain. While some animals eat plants there are many which kill and eat other animals. Birds for instance eat insects and worms, as well as fruits and grains. Cats often kill and eat birds as well as rodents of all shapes and sizes. The cat has the ability to stealthily creep up on a bird and the ability to pounce quickly sometimes catching the bird unaware. These abilities in the cat along with its sharp claws and teeth, enable it to catch and kill a bird, while a frog for instance could not—therefore a frog would not be a bird's natural enemy, but a cat would. This is a short introduction to the concept of natural enemies and it does not have to be presented in greater depth. However, an interesting fact is, that among the animals, the Arctic polar bear is so big and powerful, it is said he has no natural enemies except man! Let your student ponder on this as he is beginning to process information on natural enemies. Watch for observations he may make in the year to come as he witnesses life in the animal kingdom all around him.

If you have access to old TV or video cartoons you might remind your student of an entire cartoon series where the cat, Sylvester, was always after the bird, named Tweedy. The cartoon's adventures centered on this natural enmity between cat and bird.

Science: Human Body - Joints

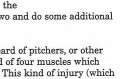
"Albert rotated his shoulders to get the kinks out." Show your student some exercises with shoulder rotations. (Just swinging your arms around in circles will rotate the shoulder.) Have him imagine how good this might have felt to Albert after the birds have flown away!

What are joints? Joints occur at the place where two or more bones meet together with cartilage between and tendons to connect the bones. Can your student name some of the joints of the human body? The shoulder, hip, elbow, knee, jaw, fingers and toes all have joints. Some of these joints do rotate, such as the shoulder and hips (called ball and socket joints), and some move only in one direction like a hinge. The knee joint and the lower jawbone would be examples of a hinge joint. Pivot-joints are like those found in the elbow. There are other amazing types of joints with other functions as well. If your student is fascinated with the study of bones, joints, and muscles* let him choose a topic or two and do some additional research.

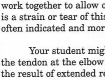
*If your student is an avid baseball fan, he may have heard of pitchers, or other players, with rotator cuff injuries. The rotator cuff is comprised of four muscles which work together to allow overhand movement from the shoulder. This kind of injury (which is a strain or tear of this muscle/tendon group) can be serious. For milder injuries, rest is often indicated and more serious injuries may require surgery.

Your student might also have heard of tennis elbow, which is an inflammation of the tendon at the elbow joint. Again, like the rotator cuff injury, tennis elbow is usually the result of extended repetitive movements, all of which involve the joints as well as the tendons and ligaments.

Science: Trees - Maple



Near Albert's apartment, outside the window is a maple tree. It was to this tree that the father cardinal flew to "sing his joy." Can your student identify a maple tree? Ask him if he thinks he could find a maple tree in his neighborhood. How would it be different from an oak tree or a spruce tree? (It would have different bark and leaves than an oak tree, and a spruce tree would have needles instead of leaves because it is an evergreen tree.) Perhaps you have a good tree book or an encyclopedia that shows the trunk, leaves, seeds, etc., of a maple. There are many varieties of maple trees. Some will have yellow, orange or red leaves in the fall. Some have silvery green leaves in the



summer rather than green ones. But maple leaves are similar in that they have five divisional sections or lobes that are usually pointed at the ends. You can see these leaves in the illustrations as Albert stands at the window with the father bird looking down at him.

The illustrations in the *Five in a Row* manual are for the teacher's information. Always, if it is at all possible, find the actual specimens from nature to show your student and let him make (or guide him gently into making) the discoveries below:

Maple leaves are shaped something like a human hand, with the main veins which run up each lobe starting together at the joining of the stem (or petiole). While looking at a maple leaf, ask your student if the edges of the lobes are smooth or toothed (serrated)? How is this leaf different from an elm leaf, for instance? An elm leaf does not have indentions or lobes but is a single oval leaf shape with serrated edges. The veins of an elm leaf are branching with opposite pairs of veins coming out from a central vein (midrib) which runs the length of the leaf (from stem—or petiole, to leaf tip). Both of the elm and the maple leaves are called simple leaves and when you study *The Hickory Chair* Volume 4, you will have a chance to review this lesson and then move on to compound leaf structures, because a hickory leaf is a compound leaf.

Have your student identify a maple tree, draw its leafless trunk and branch outline and one of its leaves. Then have him put this page in his science notebook. If he desires, he can decorate the page with cardinals, nests or eggs to remind him of the story. Or he can add these types of pages to his nature journal if he is keeping one.

You may not be in the season to find Maple seeds (Spring) but if you mention them, your student may remember seeing these helicopter-like seeds that spin round as they fall from the tree. If you can, examine the real thing and let your student write and illustrate everything he observes in this amazing seed. Then take a knife and cut the seed in half and let your student examine the inside of the seed. He can even place a seed or two in a pot of soil and see if it germinates and begins to grow.

Maple trees are the source of delicious maple syrup. Trees are tapped (a hole made, and spigot placed into the trunk) in the spring. As the sap begins to run into the trees, after the long winter, some of the sugar liquid is tapped off and gathered in buckets. The liquid is cooked for a time and pure maple syrup is the result.

(**Teacher's Note:** Does your student know that the Maple Leaf is the Canadian national symbol? The beautiful red and white flag of Canada features a red maple leaf. Find Canada in *The World Book Encyclopedia* and see if your student can find this particular fact for himself.)

Bible Lessons

Galatians 5:1

Galatians 5:1 says that It is for **freedom** that Christ set us free and that we should stand firm and not again be subject to the yolk of slavery. Albert might do well to remember this and enjoy his new found freedom being careful not to fall back into his old patterns of thinking and being afraid.

Think of a good hymn or praise song about freedom, or make up one and sing it with your student!

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Proverbs 12:10

Albert certainly personifies the verse about a **wise man** being **kind to his animals** found in Proverbs 12:10. And this was a wild animal, not even a domestic working animal or a pet!

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Genesis 9:13

Albert doesn't like the "feel" of the weather, it is too damp, and so he doesn't go outside. Perhaps he is missing the great **blessing of weather**. During most of the Old Testament the people are searching for water, hoping for water, seeing rain as the great blessing of God to help their crops grow. Rain is just as important today as well. A rainy day, may seem like a disappointment at first, but most of the time is it is truly great blessing. Enjoy the next day of rain and don't forget to look for the rainbow. (Genesis 9:13)

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Ephesians 4:26-27

In the story of Albert there is a couple who is arguing in angry voices. Eventually Albert sees them make up, give each other presents and walk off together. This is a good example of the verse Ephesians 4:26-27 where the Bible says it is ok to be angry, but not to give vent to it or to sin in reaction to the anger. It also says **not to let the sun go down on your anger**—in other words to make up quickly so that you don't give the devil an opportunity to do a lot of destruction through your angry actions. The couple in Albert certainly followed the Biblical example here!

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Psalms 104:1-12 & verses 16-28, 31
Psalm 8
Job 26:7-14, 38:4-41
39:1-28

You can find passages responding to the wonders and **beauty of nature** in Psalms (104: 1-12 & verses 16-28 and verse 31, and Psalm 8), as well as in the book of Job (chapter 26:7-14, chapter 38:4-41 continuing in chapter 39:1-28), and the Creation story (Genesis Chapters 1 & 2).

Albert is afraid to go outside. He needn't be. The Bible says that the **Lord will never leave us or forsake us** (Hebrews 13:5), and therefore we are never alone. Isaiah 41:10 says that we should not be afraid or look about us that the Lord is there to uphold us with his strong right hand. Jesus speaks of His Father in John 16:32 and John 8:29 and says that the Father does not leave Him alone will the Lord not do the same for all his children? In Genesis 2:18 the Lord suggests that it is not good for man to be alone.

Hebrews 13:5
Isaiah 41:10

John 16:32
John 8:29

Genesis 2:18

Also, although Albert doesn't know it, he is missing out on being with others. Remember Minna in *The Rag Coat*? (FIAR lessons for this book are in Vol. 1) She finds that people need people and that isolation is not the best choice. The Bible says **not to neglect gathering together** in Hebrews 10:25, and Acts 2:42). It's nice to know that in our freedom in Christ we can very much enjoy being with one another. Besides enjoying times together we also need each other to help out in times of need. Ecclesiastes 4:10-11 says that it is a pity if a person falls and has no friend to pick him up. Like Minna says, people do need people.

Hebrews 10:25
Acts 2:42

Ecclesiastes 4:10-11

What is a **sacrifice**? People have many rights and privileges and they are free to give up some of these, now and then, for someone or something else's good if they desire. For instance, did Albert *have* to stand at the window and help the birds? (No, he decided he would give up his rights to sit down and walk around for the good of the birds.)

Can your student think of something he, himself did not have to do, that he did for the good of someone or something else? (Perhaps he shared some of his own candy with a sibling, or took extra time to sweep the walk when it wasn't actually his job, just to help his dad.) Can he think of some sacrifices that his parents make? His teacher? Jesus made the ultimate sacrifice for us, in that having no sin, He willingly laid down His life for sinners. Matthew 20:28 says that Jesus came to serve and lay down his life as a ransom for sinners.

Matthew 20:28

Trees—Can your student think of specific places in the Bible where it talks about trees or a tree? What about the trees in the Garden of Eden—the tree of the Knowledge of Good and Evil and then the other one, the tree of Life? Genesis 2:8-9 and 3:22-23.

Genesis 2:8-9 and 3:22-23

Luke 19:1-10

There is the sycamore-fig tree that Zacheus climbed to get a better view of Jesus. Luke 19:1-10.

Genesis 18:1-10

Abraham was visited under the oak trees and told about the birth of a son. Genesis 18:1-10

Isaiah 55:12-13

There are the trees mentioned Isaiah 55:12-13 about the trees of the field and the cypress and myrtle trees.

Psalm 92:13-15
1 Kings 6:20
1 Kings 6:23

There are references to the cedars of Lebanon [a cedar tree is on the flag of Lebanon] and to palm trees. Psalm 92:13-15. Again, cedar is used in the building of the temple l Kings 6:20 There are also references to olive trees in the same verses 1 Kings 6:23.

Jeremiah 17:8

What about the people who will be "like a tree" planted by the water that will not be anxious in time of drought because of their deep roots? Jeremiah 17:8.

Matthew 24:32
Matthew 12:33

Jesus told the parable of the fig tree in Matthew 24:32, and also that a tree is known by its fruit in Matthew 12:33.

Deuteronomy 21:22
2 Corinthians 5:21
Acts 5:30

Jesus hung upon a tree—the cross was a tree. Deuteronomy 21:22 which gives the law to deal with grave sin. 2 Corinthians 5:21 talks about Jesus who knew no sin, and Acts 5:30 in which Paul tells what happened to Jesus. Use these three verses together.

Revelation 22:2

In the book of Revelation we see again the Tree of Life, and its leaves which are for the healing of the nations. Revelation 22:2

Albert grew to love the Cardinals and with close observation he learned a great deal about the birds. Does your student have any idea how many references there are to birds in the Bible? There are probably more than a hundred! But, here are some more familiar passages that mention birds. Remember the raven and the dove in the passages about Noah's Ark? (Not to mention the birds of each kind that were on the Ark!) Genesis 8:6-12. There were ravens that brought food to the prophet Elijah in 1 Kings 17:1-6. The sparrows had the Lord's attention in Matthew 10: 29-32. An eagle is named in Psalm 103:1-5, and Isaiah 40:28-31, while storks and cranes are mentioned in Jeremiah 8:7 and there are references to owls in Psalm 102:6.

Genesis 8:6-12
1 Kings 17:1-6
Matthew 10:29-32
Psalm 103:1-5
Isaiah 40:28-31
Jeremiah 8:7
Psalm 102:6

It is said of Jesus that even though the birds of the air have nests, he had no where to lay his head. In Luke 9:58 Jesus said he wanted to gather the people together like a hen gathers her chicks—Matthew 23:37, and the cock crowed at Peter's time of denial, Luke 22:54-62.

Luke 9:58

Matthew 23:37
Luke 22:54-62

There are many more references to birds as well!

Everyone has **strengths and weaknesses**. Albert's weakness was being afraid to go outside—a weakness which he conquered. But at the same time Albert had many strengths. He was able to find many creative things to do to keep himself occupied happily, and best of all Albert was an encourager. One thing people desire, almost more than anything, is to be loved and encouraged in life. Isaiah 41:6-7 talks about helping our neighbors and encouraging others. I Thessalonians says to encourage one another and build each other up. Albert helps and encourages the parent Cardinals and encourages the little birds to fly.

Isaiah 41:6-7

As far as strengths and weakness go in our own lives, we thank the Lord for the strengths and ask Him to help us overcome our weaknesses.

RECIPES FOR TIMES OF STANDING AROUND AND HELPING OUT A NEIGHBOR

Pitas are a wonderfully enjoyable sandwich form that can even be eaten while standing up! The cheese and apple complement each other and any crumbs can be shared with the birds. The delicious salad and Maple Syrup cookies round out the meal with color and flavor. This is just the kind of meal for a lunch or dinner in the big city.

Chef's Corner: Salad oils have different flavors, some are delicate and subtle while others have deeper richer flavors. The fruited salad dressing below calls for a lightly flavored oil such as canola oil. While you may use olive oil if you desire, it's heavier taste may be overpowering in this particular recipe.

_____ Cheese and Apple Pitas

1 cup Cheddar, Havarti, Monterey Jack, or Colby cheese, diced (a mixture is delicious)
1 cup unpeeled red apples, diced
1/2 cup thinly slice celery
1/4 cup chopped pecans, walnuts or cashews
3 Tablespoons mayonnaise
1 Tablespoons lemon juice
1 teaspoon sugar
Salt and pepper
3 pita breads
Green lettuce leaves

Into a medium-size bowl, mix together cheese[s] and apple dices, celery slices and chopped nuts. Into a small-size bowl, mix together mayonnaise, lemon juice and sugar. Fold mayonnaise mixture into cheese mixture. Salt and pepper to taste; reserve. Cut the pita bread to get 6 halves. Open up the halves to make a pocket. Garnish each pocket half with lettuce leaves. Evenly spread with reserved cheese and apple mixture.

_____ Spring Salad with Blackberry Vinaigrette

Choice of fresh lettuces (butter, red leaf, oak leaf, romaine, or iceberg)
strawberries, sliced
zucchini, diced
red onion, thinly sliced
cucumber, diced
yellow bell pepper, diced
peas

Wash the lettuces, dry them and tear into bite size pieces. Arrange with the vegetables and fruit. Cover and chill for at one hour. Prepare the Blackberry vinaigrette, drizzle it over the salad and serve immediately.

Blackberry Vinaigrette

1/4 pound blackberries (frozen is OK)
1/8 cup rice wine vinegar
1/8 cup lemon juice
1/2 teaspoon kosher salt
1/8 cup honey
2 Tablespoons fresh basil
1 pinch fresh ground pepper
1 cup canola oil

Place all vinaigrette ingredients except oil in food processor or blender. Mix for one minute then, while running, slowly add oil.

_____ Maple Syrup Leaf Cookies

1 cup shortening
1 cup brown sugar
1 eggs
1 cup maple syrup
1 teaspoon vanilla
4 cups sifted flour
2 teaspoons Baking soda
1/2 teaspoon Salt

Cream shortening and sugar. Add eggs, syrup and vanilla. Beat well. Add dry ingredients and stir until well blended. Chill; shape into balls 1 inch in diameter. Roll in granulated sugar. Bake 10 minutes at 350 degrees. As soon as you pull the cookies from the oven, use a heavy cardboard template of a maple leaf (the one from your science lesson will work for a pattern for the cardboard) and pressing the template with a fork gently into the cookie, make a maple leaf imprint on top of each one. Allow to cool. Yields 3 or 4 dozen. These cookies freeze beautifully and remind us of the beautiful, useful, maple tree.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title: The Hickory Chair
Author: Lisa Rowe Fraustino
Illustrator: Benny Andrews
Copyright: 2001
Summary: As a boy, Louis has a special relationship. The events of that relationship involve a mystery which is finally revealed when he is an old man.

Social Studies: Family Relationships

In the story, *The Hickory Chair*, we see a large family. Louis' family was made up of Gran as the oldest, her three children Candy May, Lofton and Louis Sr., and their spouses and children, Louis being the youngest grandchild. This family spent time together—at least we know they were together on Sundays. The children played together and we know the adults had a close relationship based on their reactions to Gran's death and how they worked together to take care of her estate.

Talk about your student's family. How do they spend time together? What are their traditions? Let your student write a piece for his notebook about a special family gathering he remembers. Remind him to try to recall all the sights, sounds, colors, tastes, aromas, feelings, personalities and events that he can think of.

Social Studies: Family Relationship - Grieving Together

Has your student's family ever gone through a deep sadness as Louis' family did when Gran died? How did they react? In this story they all cried together, apparently for a length of time. Finally, the story says, "when every eye was cried out" they commenced to read her will. It is important that the family allowed everyone time to grieve. Then Gran's playful heart, coming up with the idea of hiding notes, gave everyone a sense of adventure even in the sadness and they continued to be bathed in wonderful memories of her.

Social Studies: Family Fun - Games

Begin by reminding your student that Louis has a very special time playing hide and seek with his cousins and his grandmother. Hide and Seek is a game which has been

played for generations and one that needs no game board or pieces, just a few places to hide. Played with two or more, one is chosen to be the seeker. He covers his eyes and counts to the agreed upon number. While the designated seeker is counting, the others run to a hiding place where they think they will not be found. At the end of the count, the seeker begins to hunt for those in hiding. In some games the rules are that the players hiding can wait until they think they can make it back to the starting base without being caught, and they try to get there before the seeker can tag them. In this case the first one found or tagged, will be the seeker of the next game. In other games, the last one found is declared the winner and the first found is the new seeker. This game can be played inside with hiding places such as under the bed or in a closet, or it can be played outside where there is a great variety of places to hide. (**Teacher's Note:** As a safety precaution, warn children about hiding in places that may prove dangerous.)

The title of this story *The Hickory Chair* is reminiscent of another game that children used to play called Musical Chairs. While this game is probably too young for the student of FIAR Vol. 4, it is still valuable to know what the game is and maybe help some younger children to enjoy a time of fun. In musical chairs there are chairs set up side by side in a line but with each chair alternating facing frontward or backward. There are enough chairs for the number of children playing—minus one! The game begins as music starts and the children march in a circle around the line of chairs. All of a sudden the music stops, everyone grabs a chair and the one left without a chair is out. (As children go out they can join with the person in charge of starting and stopping the music.) One chair is removed and the game continues until there is only one chair left, the music stops and one of the two people left gets the last chair and becomes the winner. Even though this is a game usually played with younger children, an entire family could have fun playing together as well!

Social Studies: Architecture - Attics and Wardrobes

Remind your student how Louis and Gran spent time sitting on Gramp's trunk in the **attic** and listening to the wind singing on the roof.

Does your student know what an attic is? So many homes, built in the last few decades, have not been designed with attics that many children don't even know what an attic is! Homes used to be built with an area above the top floor of living space. This attic area was usually unfinished with the exception of possibly electric wiring for a light, and stairs to reach it. Occupants of the homes used the space to store trunks, furniture, and other items not in use at the moment. In an attic one might find some old clothes, souvenirs of past vacations, the old baby crib and stroller and old toys all saved from the children of the past for the grandchildren to come.

Often attics had steep sloping roofs because they were created in the space above the rooms of the house where the roof beams joined. In climates where the summers were warm, the attic was the hottest place in the house, due to the fact that warm air rises!

Many stories have exciting adventures that began when children find some wonderful thing stowed away in the attic. Again in *The Hickory Chair* Louis and Gran sit in the attic, and talk and shed a few tears, play games and listen to the wind in the roof.

Also, in the picture opposite the first page of text in *The Hickory Chair*, Benny Andrews, the illustrator, has drawn a wardrobe. A wardrobe is a large piece of furniture that functions as a closet and makes room for both hanging clothes and folded clothes. Wardrobes were common in most houses before built-in closets became the fashion. Yes, it is true, for many years from the beginning of our country until well after the Civil War, many houses (especially rural) did not have built in closets and clothes either hung on pegs, or in wardrobes!

Language Arts: Supplemental Book

Miss Hickory is the tale of a doll, left behind by her owner, who must "make it on her own." This story by Carolyn Sherwin Bailey was the 1947 Newbery Award Winner and has been a childhood favorite for generations. As a tie in to this week's story lessons, *Miss Hickory*, the little apple twig doll with a hickory nut for a head, might be fun for girls to read after enjoying *The Hickory Chair*.

Language Arts: The Adventure of Making Lists!

The story of *The Hickory Chair* inspires making lists! Remember the note Louis thinks is his? What is it really? (A grocery list) Try making a list of the clues in the story that tell of Gran and another list of those that tell you about Gramps. (Gran's list might contain some of these: she is a good hider, is cheerfully visited by her family on Sundays, smells of lilacs and a whiff of bleach, has a warm face, owns a tattered Bible, etc. Gramp's list could have: carved a bed for his son, carved the hickory chair from their own tree, went to a workplace, was in the army, etc.) If you are enjoying list making, try making a list of all the "favorite people": favorite youngest grandchild, Louis; favorite grandson born on Tuesday, Cousin Bill-Bob; favorite tallest son, Louis,Sr.; favorite eldest grandson whose father snored here, Louis' brother; favorite middlest grandchild, Cousin Lucille. List Gran's three children: Candy May, Lofton, and Louis Sr. And last of all make a list of all the places that the grandchildren found notes: mirror, trunk, bed, Bible, hickory chair. That Gran sure *was* a good hider!

Language Arts: Descriptive Prose

Lisa Fraustino writes with a prose style that is often like poetry. When she describes the great hickory tree from which Gran's favorite chair was carved, she writes Gran's reminisces, "I...see that old hickory tickling the belly of the sun." In this line the author uses personification for both the hickory—that *it* did the tickling, and of the sun—that it had a belly and could be tickled.

Fraustino also uses imagery when she describes Gran's voice as a molasses voice. Pair this discussion with the lesson on molasses below. When your student sees how thick and rich and slow pouring molasses is they will better understand the description of Gran's sweet, smooth, rich, slow voice.

In addition, the author of *The Hickory Chair* writes about Gran's salty kisses, when she and Louis are in the attic. Ask your student why he thinks her kisses are salty. If he doesn't know wait and don't tell him right away. Perhaps after a day or two of re-reading the book your student will suddenly realize that it might have been because Gran was sitting on her husband's trunk and missing him! The salty kisses came from her tears. It is exciting for a student to make these kinds of observations on his own, if possible.

Language Arts: Vocabulary

molasses	(also see Science: Cane and Molasses): a dark sugary syrup obtained as a result of sugar refining
connive	to cooperate secretly, to conspire together
commence	begin (as in commencement)
to no avail	a saying which means something was not accomplished
curdled	to coagulate (changing into a thick mass), or become curd
collage	method of creating a work of art with combinations of paint, fabric, string, paper scraps, etc.

Language Arts: Reading and Speaking Practice

For fun, both you and your student try reading and then just speaking with your best "molasses" voice. Can you attain that rich smooth drawl as you read the story or just talk together? As a point of observation, listen together for people speaking with various accents and voice rhythms. You might notice someone speaking at a grocery store or on a bus, or on the radio. As Fraustino describes Gran's voice as molasses—encourage your student to think about how he would describe the different voices, accents and patterns of speech that he hears. Have him use descriptive words and keep a list if this seems like fun. Also, your student can pretend to be a radio or television announcer or advertiser and act out a scene (which you've written) with a molasses voice!

Art: Learning About Museums

Looking at the information on the dust jacket your student will discover that the illustrator of *The Hickory Chair* has his works in the permanent collections of many different museums. Museums listed on the dust jacket include: The Museum of Modern Art, The Metropolitan Museum of Art , and the Brooklyn Museum all in New York, and the High Museum in Atlanta, Georgia along with the Ohara Museum in Kurashika, Japan. (You may want to include for older children the names of other famous museums such as the Chicago Art Institute, the Guggenheim Museum, and the Louvre which is located in Paris, France, etc.)

What is a museum? A museum is a place where collections of paintings, sculpture and artifacts are displayed. There are different kinds of museums where instead of paint-

ings you may see other displays, such as natural history museums where you can see live and preserved animals on display as well as rocks, shells, etc. There are also topical museums that concentrate on trains or planes or the circus, etc.

In this discussion now, however, we are talking about art museums or galleries. In this type of museum you will find paintings, drawings, sculpture and sometimes artifacts. Museums of this sort often own a number of paintings, etc. Sometimes they own so many that they cannot display them all at once. The museum curators will display some and then change their displays rotating their permanent collections. A permanent collection (such as the collection which houses Benny Andrews' artwork) means that it is owned by the museum and you can expect to see the work there on a regular basis.

Once in a while such a museum will host exhibits that have been traveling throughout the country and are just at the museum for a short time—usually a month or two.

Find a museum (even a small gallery will do) and take you student to see the work of various artists. If you begin such trips at an early age you will find that on subsequent trips your student will develop personal favorites which he will enjoy seeing each time you go!

Art: Medium

The copyright page of our story tells us that Benny Andrews, the illustrator, used oils and fabric collage for the pictures of this book. These illustrations, then, would be considered *mixed media* works of art.

Look at the dedication page. Can you see the brush strokes in the light colored oil paint above the woman on the bench? Now look at the page where Gran and Louis are in the attic sitting on Grampa's old trunk. Under the rafters it looks as if the artist used linen or cloth of some kind and painted over it. Look for other examples of brush strokes in oil, and of fabric in his illustrations. If there is interest, let your student try some paint and fabric collage art. Using either watercolor or acrylic paint (much like oil except it just dries faster) and a pile of scrap fabric (you can buy scrap fabric at the x-mart stores, if you don't have any) let your student experiment with this media! If you don't have stretched canvas to work with try a heavy piece of cardboard as the surface for the picture. Your student can draw his picture right on the cardboard and then paint and apply fabric right over the drawing.

Art: Color

Talk about the colors Mr. Andrews used in his illustrations for *The Hickory Tree*. Beautiful greens, pinks, blues and yellows are seen throughout the illustrations of the story and tie the story together simply through the theme of color. Look with your student at the last picture of the text. Have him notice the pink color in Louis' coat. Can your student see how this color is also on the top of the chair cushion and in the granddaughter's dress and again on the rug? In how many places is the yellow used in this picture—the blue? Try this exercise with any of the pictures in the book and your student

will realize that with the thousands of colors available to an artist to use, a good artist will limit his palette. He will use just a few colors (light and dark values of the same color) over and over in his painting to keep the work from being too busy and distracting.

Art: Details and Observations from Illustrations

Look with your student at the title page. Ask your student what he sees in the picture. (He may say that he sees Louis looking out the window.) Perhaps he wonders why Louis would be at a window if he is blind? Maybe he can think of some reasons why this might be so. (The sun is warm and Louis would be able to feel that. There is a bird on the windowsill reminding the reader that there would be all sorts of noises coming from the outside that might interest Louis as well.)

Then look at the picture on the back cover of the book. This picture is the heart of the story, what the author wants us to remember—that Louis had a special relationship with his Gran and that they loved each other. The way their bodies are leaning toward each other with Gran gazing down at Louis, gives us insight to the loving depth of that relationship.

Art: Sayings in Art Form

Notice the first illustration of the story where Gran hides Louis in the bed that Gramps had carved long ago. Above the bed is a wall hanging with the saying, "Home Sweet Home." Perhaps your student would like to create a wall hanging with this or a similar saying on it to place somewhere in his own home.

Just for fun, brainstorm other sayings with the word "home" in it: Home for the Holidays, No Place Like Home, My Old Kentucky Home, Home Run, Home Base, Home Is Where the Heart Is, etc.

Math: Learning About and Making A Graph

Discuss with our student the concept of making a graph. Why does he think we use this type of communication? (A graph is a *visual* representation of gathered or complied information. A graph can quickly show in visual form a great deal of numerical information. There are several different types of graphs including a bar graph, a pie or (circle) graph, and a line graph.

Have your student take the lists he made in the Language Arts lesson on List Making, and make a graph to chart the number of items in each group. This would be a graph showing how many items were on each type of his lists. Grocery List—three items, number of places where Gran's notes were hidden—five, the children's names—five, the number of hiding places, etc. When your student is finished with his graph, which of your lists was the longest Which one was the shortest? He would know the same information by reading the results of each list, but with a graph he can see it instantly! Ask your student if he thinks his information would fit better into a bar graph, a pie graph, or some other type of graph? He might want to make one of each and see which he thinks is the eastiest-to-understand visual representation of his facts.

Math: Understanding Generations

Louis was a young boy and the story of *The Hickory Chair* begins when his Gran is still alive. Louis' family then, would consist of three generations: grandparents, children and grandchildren. There is, on average, approximately twenty to twenty-five years between each generation in a family.

Louis grew up and is shown at the end of the story with a granddaughter of his own. That would mean that Louis had been a father to at least one child of his own. So, there would be the addition of two more generations in Louis' family. From the beginning of the story to the end there were five generations represented from Louis' family. (Remember that Gran was no longer alive when Louis' child(ren) and grandchild were born.) How many generations are currently represented in your student's family? In your family? (Remind your student of his study of generations in the *Five in a Row* story selection *They Were Strong and Good* by Robert Lawson.)

Science: Bleach and Lilacs

(**Teacher's Note:** Please consider the age of your student. This lesson is for your older student. Chlorine Bleach is poisonous in quantity and can do damage to fabrics, rugs, etc. Please keep bleach out of reach of children.)

Lisa Fraustino writes that Louis described Gran as smelling *like lilacs and a whiff of bleach.* Does your student know what bleach is and what it is commonly used for? Why might Gran always smell a bit like bleach? (Gran was used to using this household product for laundry days.) Put a drop of bleach on a cotton ball or paper napkin and let your student smell what bleach is like—don't put it too close!

Chlorine bleach and oxygen bleaches are used for whitening and brightening colors in the laundry. Chlorine bleach can take the color completely out of colored fabrics and so it is used sparingly on these darker clothes or the less harmful oxygen bleach is used instead. Chlorine bleach is used on whites to take out stains and brighten the garments. Look through the illustrations of *The Hickory Tree* with your student and notice in how many pictures Gran has a white color and sometimes cuffs. If these were removable garment pieces, she might have bleached them to keep them bright white. Even though the collar and cuffs could have been well rinsed, there would still be a faint whiff of bleach discernable to Louis.

Small amounts of chlorine bleach are used to purify drinking water and chlorine bleach is also used as a disinfectant. So, Gran might have used bleach in her cleaning water. If she cleaned some every day, she might have smelled a bit like bleach from that activity.

A lilac is a shrub with pinnacles of small purple flowers that bloom in the spring and it has a lovely fragrance! Louis' Gran may have had lilacs growing in her yard, but the fact that she *always* smelled like this flower was probably due to using a cologne or bubble bath, powder, etc., that had the lilac fragrance.

Science: Chemistry - Testing for Acids and Bases

Litmus is a substance that scientists use to test the acidic or basic quality of a solution, in other words to find whether it is an **acid** or a **base**.

Litmus paper is composed of strips of paper with the litmus substance on so that it can be dipped in a solution for testing. The strips are either red strips or blue strips. Red litmus paper will turn blue in the presence of an acid but not change in the presence of a base or neutral solution, while blue litmus paper will turn red in the presence of a base and not change if the solution tested is an acid or neutral.

Have your student use red litmus paper strips to test small amounts of orange juice, lemon juice and vinegar in small separate bowls. (Remind your student that all **citrus juices** are acidic, such as lime, grapefruit, etc.)

Science: Chemistry - Chemical Reaction - Curdling

Put 1/4 cup milk in three separate glass dishes. (Glass is suggested so that you can see the process, but any type container can be used.) Add one tablespoon of lemon juice, to the first dish, then a tablespoon of orange juice to the second dish and one tablespoon of vinegar to the third dish. Leave for 5 minutes and then examine. What happened? (The milk will curdle.) This is the same chemical reaction that is used to turn fresh milk into buttermilk and cheese.

Remember from previous FIAR story lessons that a *chemical reaction* is one in which two or more substances react together to form a new compound. If your student stirs some sugar into a glass of water, he will have two substances mixed together—a **mixture**, yet both substances remain the same and can be separated from one another (by physical means like evaporation). In a chemical reaction, such as stirring a citrus juice into milk, the two compounds react together and change into another compound, as sour milk, something like buttermilk. It is not possible to return the substances to their original forms—they have made a new substance. Curdling then, is a chemical reaction that produces a new substance.

Now that you have done this experiment why does your student think the author of *The Hickory Chair* described Lewis' reaction in this way, "...and the air curdled in my throat." Just before in the story when Lewis thought he found his own note, he said the air tasted sweet—now he says it "curdled." Discuss this with your student and see if he has any ideas. Talk about the fact that when we are terribly disappointed, we sometimes have an acidic taste in our mouth. Just like our feelings the very saliva in our mouths becomes a little thicker and sort of sour tasting!

Science: The Human Body - The Eye

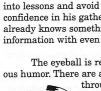
[**Teacher's Note:** As you read through this lesson, keeping in mind the age of your student, remember that in *Beyond Five in a Row* one of the biographies studied is Helen Keller. During this study the human eye and other related topics will be presented in a

manner appropriate for students eight to twelve years old. Therefore, you may decide how you wish to cover the following lessons—perhaps in just an introductory way.]

The story of *The Hickory Chair* brings up the subject of human sight as well as blindness. First, if you have not covered the eye in past lessons on the human body, then take the time to give a simple explanation of the eye and how it works before tackling the subject of blindness.

Ask you student if he knows that the human eye is an incredible optical device that is something like a camera! There is even a part of the eye we call the lens! (It's always good to find out, through interesting leading questions, what your student already knows about a subject and then add on from there. For instance maybe your young student knows that bright light hurts his eyes and makes him want to shut them. Or he might say that he knows that you have to be careful with your eyes because when they are poked they hurt! Your student will let you know what he knows and that can lead into lessons and avoid needless (boring) repetition. This method also gives your student confidence in his gathered knowledge, and an encouraging beginning to his lesson—he already knows something about your topic! He will then continue to take in the new information with even greater enthusiasm.)

The eyeball is really a sack filled with liquid. This jelly-type liquid is called vitreous humor. There are also parts on the front of the eyeball which allow light to come through. The pupil, which is the actual opening, the iris which is the part that gives each eye it's color, blue, brown, gray, etc., and which contracts and expands to allow more or less light to enter the eye through the pupil according to the need of the moment.



After describing the pupil and the iris and pointing to the illustration, ask your student if he has even noticed when a light is turned on at night it seems too bright and makes him want to close his eyes? Sometimes the sunlight itself is too bright.* There are times when there is too much light and the iris of the eye contracts to close down around the pupil and only let a small amount of light in. In the same way, at night we need to have all the light available to see objects in the darkness. (In pure darkness we could not see.) However, the kind of darkness in a bedroom at night or outside at night still has enough light to let us see objects. At these times the pupil of the eye will look much larger because the iris has expanded to let all the light that is available in through the pupil. Your student can see the difference in the pupil size if you go into a moderately dark room. Wait a few moments. Then let him look at your eyes and have him pay attention to the pupil size. Then while he is keeping his eyes on yours, turn on a light and have him notice what happens. The pupil size will become much smaller.

Covering the pupil (again, the hole through which light enters the eyeball) is a very clear lens and over that a protective clear cornea. Both the lens and the cornea help focus the light rays into the eyeball and toward a specific point at the back of the eyeball called the retina.

Often the optic nerve is also pointed out to students at this time as an introduction to the concept that the images seen through the eye are coded and transferred by the optic nerve to the brain for processing.

You may want to find a simple book at your library to go over these ideas and allow your student to make some notes and illustrations for his science notebook.

*Safety: Make sure that your child knows it is truly dangerous to stare directly at the sun. Talk about wearing sunglasses (he still cannot stare directly at the sun even with sun glasses) and about how he can take good care of his eyes.

Just for fun, notice how at dusk, just before dark, it seems as if the colors have gone away? Everything—the trees, birds, houses—look more like a black and white picture than the glorious color picture seen in the daylight. This is because it takes light to allow us to register colors. (This is a lesson in light—but the brief preview of such understanding through observation can begin now as we talk about the human eye. Later when you come to a lesson on light and color it will be more familiar to your student.)

Science: The Human Eye and Tears

When Gran and Lewis sat on the truck in the attic Gran had tears in her eyes. How did Lewis know this? (Lewis said she had salty kisses.) Eyes do so many things. They let us see in the daytime and help us see even when it is darker. Our eyes open, and shut protectively and they tear up both for protection and during times of great emotion.

First, the tears of protection are what happens when an eyelash or bit of dirt get in your eye. The eye tears-up to wash away the intruding matter. When the eye is poked or hurt it also tears to wash away harmful bacteria. Another critical feature of tears is that they lubricate the eyeball and keep it from drying out which would be very dangerous.

But why are tears salty? The fluid that makes up our tears has in it substances that help fight infection. Salt is a part of that solution. (Has anyone ever suggested to your student that he gargle with salt water for a sore throat or soak an injury in Epsom salts? Salt is used to help disinfect and provide an environment that is not healthy for dangerous bacteria.) Salt is part of a regimen that helps fight infection.

For further information, *The World Book Encyclopedia* gives an excellent explanation of the process of tears.

Science: The Human Eye and Blindness

A few sentences into the story of *The Hickory Chair* we find out that Louis is blind. Louis himself, states that he was born blind. Sometimes children's eyes do not develop properly and they are born blind. More frequently, blindness is a result of an illness, disease or an accident. With your student, talk about the differences in being born blind and losing sight later in life.

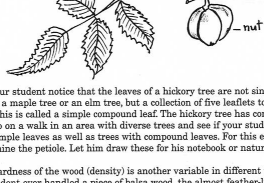
Ask your student if he knows the wonderful advance that was made into the lives of the blind by a man named Louis Braille? Briefly describe how this man invented an entire new language of writing (a system of raised dots) which allows the blind to be taught to read. A blind person who has been taught to read by this method can read anything that has been translated into Braille. They can also write in the Braille language as well.

If possible show your student the Braille words on elevators and other public places.

[**Teacher's Note:** You don't have to go into great detail with this lesson. In *Beyond Five in a Row* there will be a unit on Helen Keller with detailed information on the human eye, and Louis Braille, appropriate for students eight to twelve years old.]

Science: Botany - Hickory Tree

Remind your student that Louis and Gran discussed the hickory tree that "tickled the belly of the sun." How many different trees does your student think he can recognize? Maybe he would like to start a nature journal with drawings and facts about the different trees that he sees around him. We recognize and identify trees by their shape (of trunk and branches), their bark, the arrangement and shape of their leaves, and their fruit or nuts. We can also pay attention to their typical size, whether or not they produce good shade, whether they are colorful in the fall, and their longevity, etc.



Let your student notice that the leaves of a hickory tree are not single leaves on a petiole as on a maple tree or an elm tree, but a collection of five leaflets together on a single petiole. This is called a simple compound leaf. The hickory tree has compound leaves. If you can, go on a walk in an area with diverse trees and see if your student can identify trees with simple leaves as well as trees with compound leaves. For this exercise, he may need to examine the petiole. Let him draw these for his notebook or nature journal.

The hardness of the wood (density) is another variable in different types of trees. Has your student ever handled a piece of balsa wood, the almost feather-light pale wood? A similar sized piece of hickory would feel much heavier and while you could push a nail into balsa with your fingers it would take a hammer to put a nail into a piece of hickory. A hickory tree has strong, hard wood used often to make handles for tools such as rakes, shovels, axes, etc. From this information, does your student think that a rocking chair made from a hickory tree would be strong and last a long time? Remembering the illustrations on the last page of the story your student will know that the rocking chair lasted through Louis' lifetime and will probably last through the life of his grandchild! Many pieces of furniture that have been made from various hardwoods, have survived generation after generation for hundreds of years. Perhaps your student could visit a museum and see pieces of furniture that were hand carved back in colonial times, and other pieces that were manufactured long, long ago.

Besides the valuable product of hardwood, a hickory tree has nuts that are sold and consumed by the public. Pecan trees are related to the hickory and pecans are an extremely popular food nut.

Science: Sugar Cane and Molasses

Does your student know what molasses is or where it comes from? Has he ever thought about where sugar and molasses come from? How many things are all around us that we so take for granted that we never even wonder what they are or how we obtain them? Have your student pause for a moment and be filled with wonder that there are so many interesting things to learn about!

Molasses is a by-product that comes from the process of converting sugar cane into sugar. It is a thick sweetish brown liquid. Some children may not find molasses as tasty as honey but you can make a good table molasses by mixing two-thirds golden molasses with one third corn syrup. The subsequent taste is not quite as strong as straight molasses and it is a real treat on fresh buttered cornbread. Try some while you're reading *The Hickory Chair* and think about how rich and smooth and velvety Gran's voice was!

For further research check your encyclopedia to find out how molasses and sugar are made and which countries grow sugar cane. Where else can we get sugar? (Sugar is also refined from sugar beets.)

Bible Lessons

Do you want to gently guide your student toward maturity in an area that is often neglected these days? How does he relate with the elderly? It is a privilege to help the young appreciate both how older people are different, and also how much they know and can share. Sometimes families do not have grandparents and great grandparents nearby and sometimes there are no elderly neighbors. But even if this is the case with your student he can begin to appreciate older people through great books. *The Hickory Chair*, as well as stories like *Arabella*, *The Raft*, and *Gullywasher* all provide wonderful models and opportunities for discussing close, mutually beneficial relationships between children and older adults.

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Proverbs 13:12

There is a verse in Proverbs that has a wonderful tie-in to the story of *The Hickory Chair*. Proverbs 13:12 says that while **hope deferred** makes one feel sick at heart, when the hope is realized it is like a tree of life!

When Louis is searching and hoping for his own note from Gran he becomes more and more discouraged as nothing is found. He even becomes so discouraged you could say, that as he ran out of Gran's house, he was heartsick. There is a point in the story where Louis made peace with these feelings and became content in Gran's love even without the evidence of the note. Yet, in the last scene of the story, when the note is finally found and you see Louis raising his face to the sky you realize that his hope has been realized and it is to him like a tree of life!

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Philippians 4:11
Hebrews 13:5

Louis found **contentment** in the midst of his sorrow. (Philippians 4:11, Hebrews 13:5) How did this happen? Louis was so sad that there was no note for him. Ask your student if he would feel the same way. Most of us would. With time, Louis remembered how much his Gran did love him and he found authentic contentment when he sat in her chair. Without the specific proof of the note, he chose **through faith** (based on the truths of his past times with Gran) to believe that she had loved him just as much as the others.

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In our story *The Hickory Chair*, Louis is the one who feels forgotten. But when we are honest, all of us at some time **fear being left out or forgotten**. It is a fear that can strike quickly and leave us feeling devastated and isolated. It may interest our children to know that a father can feel this anguish among co-workers, or a mother can sometimes feel left out by friends. It certainly isn't just children who sense these kinds of feelings. In some ways, Louis' feelings in this story truly showcase for all of us one of our greatest fears—that of being forgotten.

So, what do we do about this problem? We can begin by finding our satisfaction in God alone. He, of course is the One who says, I will *never* leave you or forsake you (Hebrews 13:5), I know you. You are mine! Through this verse the Lord is saying, I know you"—therefore He cannot forget you. (John 10:14)

Hebrews 13:5c

John 10:14

Children, who read the stories of the Bible and see time after time the faithfulness of the Lord toward those who wait on Him, as well as personal incidents where the Lord makes Himself, and His care, known to them begin to grow in their trust and confidence that the Lord is their *own* Shepherd and they have no need to want! (Psalm 23) They will always be loved and they will never ever be forgotten!

Psalm 23

Ask your student what **influence for Christ** he thinks Gran brought to her family. (Answers will vary, but it appears that Gran had a strong faith and its outworking was in the love (1 John 3:16 & 23, 1 John 4:7-11), joy and creativity she poured out to her family. She even had a special name for each family member! What families in the Bible does your student think represent families of strong faith that is passed on to their children? A few possible answers might be Noah's family, Abraham's family, Moses' family, etc., and all families even today that have received salvation and follow the ways of the Lord holding out the baton of faith to the next generation.

1 John 3:16
1 John 4:7-11

RECIPES FOR A BOY WHO WASN'T FORGOTTEN

This is family food, good for any occasion whether it be a happy time or or a time tinged with sadness, the good thing is that the family is together. The recurring theme of the importance of deep family love and nurture, once again influences the recipe choices. As for the peppermint dessert, maybe it was brought by a special aunt, but not in her purse!

_____ Smothered Pork Chops and Gravy

6 pork chops
1/2 onion, diced
seasoned salt
freshly ground pepper
2 cups flour
2 cups vegetable oil

Season the pork chops with the seasoned salt and pepper. Place flour in large bowl and add additional salt and pepper to the flour. Coat the chops with the seasoned flour and set aside.

In large skillet or frying pan, heat vegetable oil over medium-high heat (approximately 3-5 minutes). Add enough pork chops to fill, but not crowd the pan. Fry the pork chops until brown on one side. Then, turn each pork chop and repeat frying until brown on other side. Remove pork chops and all but about 3 teaspoons of oil (reserving as many brown bits of pork chop and flour coating as possible.) Add about 5 teaspoons of the seasoned flour to pan. Over reduced heat, brown the flour in the remaining oil and crust. Add about a cup of water. Bring to boil. Then, put fried chops back into pan with browned flour and water mixture, reduce and simmer for about 20 to 25 minutes, turning chops occasionally. Let stand 10 minutes and serve.

_____ Fried Corn

8 large ears of sweet yellow corn
1 green bell pepper, diced
1 red bell pepper, diced
1/2 cup all purpose flour
1 tablespoon sugar
salt and pepper to taste
1/2 cup shortening

Shuck and de-silk the ears of corn, then rinse. Using a sharp knife remove the kernels from the cob, scraping to get it all of the corn and creamy corn juices.
Mix the diced peppers, flour, sugar, salt and pepper together coating the corn well with the mixture. Heat shortening or oil until one kernel dropped in it sizzles. Put your corn in

the skillet and fry until the corn is tender and the flour starts to brown. Stir frequently to prevent the flour from sticking. Serve immediately.

Peppermint Cookies

1 1/3 cup prepared vanilla frosting
6 tablespoons crushed hard peppermint candies
1/2 teaspoon peppermint extract
40 chocolate wafers

Combine first three ingredients. Spread on half of the wafers and top with remaining wafers. Makes 20 sandwich cookies. Serve immediately, or they can be served chilled.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	Hanna's Cold Winter
Author:	Trish Marx
Illustrator:	Barbara Knutson
Copyright:	1993
Summary:	A cold winter, starving animals and a town with a heart weaves a story based on a true incident that will intrigue all of its readers.

(**Teacher's Note:** For the name of the character actually telling this story [Tibor] preview the Language Arts lesson on first-person point of view in this unit section.)

Social Studies: Geography - Budapest, Hungary

Hanna's Cold Winter takes place in the country of Hungary and in a city called Budapest. The story says the city was actually the twin cities of Buda and Pest, divided by the Danube River. Place your story disk on Hungary or on Budapest if your map shows it. If you are interested in flags of countries, the Hungarian flag is divided into three equal parts horizontally. The top third is red, the middle third white and the bottom third is green.

The Danube River has its source (beginning) in West Germany and flows through Austria, Hungary, Yugoslavia, and forms the border between Romania and Bulgaria as it flows to its mouth (end point) at the Black Sea.

Did you know that you can still see the giant lion statues on the Lanchid Bridge at the Danube River? The famous Gellert warm mineral baths in Budapest still draw crowds of tourists. (In Europe the word *bathing* means swimming. See the girl's swimsuit in the pictures of the Gellert baths?) There is also still a zoo in Budapest and they still have hippopotamuses! Apparently the zoo has not been kept up in the manner that it was in the 1940's. Still, it is amazing that the zoo, its buildings and the hippos are still in that special city. (If you can, use the Internet to find European travel data on Hungary or more specifically Budapest which sometimes shows maps and talks about the famous sights of the country.) Who knows if someday your student will visit Tibor's favorite zoo?

Also, the monetary unit (money) used in Hungary is the forint. Tibor's papa has forints jingling in his pocket! It was kind of the children not to beg Papa to go to the zoo. It cost money and they knew he would take them if he could. Waiting for things you enjoy is part of growing up. It was an enjoyable tradition that Papa created, too, to stand

and jingle the forints in his pocket when it was a zoo Sunday. Traditions like this are remembered for a lifetime!

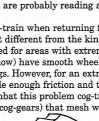
Look, also, at the market where Tibor's brother disappears to do his shopping. The text talks about eggs, tomatoes, chickens, cheese, spices and candy being sold in the market. Ask your student what else he can see in the pictures? In the illustrations there are cabbages, flowers and possibly green beans. And, are those red paprika peppers hanging at the back of the stalls? (Remember Tibor's papa loads peppers at the factory?) The next page says that the family has to purchase sugar, butter, cloth for pants and shoes though we don't know if all of those items come from the same market.

Social Studies: History - Through the Illustrations and Text

In Budapest, during the fighting of WWII, Tibor's family stays indoors and sits in front of the fire listening to the radio. Their family does not have television for news but rather a radio. (Television, invented in 1930's was not marketed to most homes until after WWII.) Just as in this story, people throughout the world sat by their radios to hear the news of the day and wait for word that the war had ended.

Look at the unusual fireplace in Tibor's home. It is a tall with tiles covering the inside chimney portion. You can see similar fireplaces in stories set in Europe and in pictures of European homes in art books. When you see this type of fireplace in a story illustration, stop and remember you are probably reading a story set somewhere in Europe!

Tibor's family rides a cog-train when returning from visiting the zoo. What is a cog-train (cog-railway) and how is it different from the kinds of trains that are more familiar? Cog-railways were built and used for areas with extremely steep grades. A traditional railroad (the kind most of us know) have smooth wheels which run upon smooth tracks. This works well for most settings. However, for an extremely steep grade the smooth wheel and track does not provide enough friction and the wheel slips causing the train to slide backwards. In order to combat this problem cog-trains have tracks which are built with a jagged surface (just like cog-gears) that mesh with a wheel that also has a jagged-gear like surface.



The meshing of the wheel and rail surface eliminates the friction problem and allows an engine to pull a train up a steep grade with no danger of slipping backwards. You may still be able to find a cog-railway in some places today, but they are basically a part of the past. One of the most famous is in Colorado Springs, Colorado.

(**Teacher's Note:** The architecture of the walls in the picture with the cog-train actually duplicates the gear like pattern of the tracks and wheels!)

Social Studies: History – World War II

Does your student remember what the **conflict of the plot** is in a story? A conflict is the problem for which the characters seek a solution. The conflict of the plot in *Hanna's Cold Winter* stems from the fact that the Budapest Zoo animals can't get enough food that winter due to the war. The war was World War II. World War II (1939-1945) included fighting in many countries. In *Five in a Row* Volume 1, you may have studied lessons from the book *Grandfather's Journey* by Allen Say and discussed lessons about WWII concerning Japan. In *Five in a Row* Volume 2 perhaps you read *A New Coat for Anna* by Harriet Ziefert and learned about countries of Europe with bombing damage from WWII. You could also now tie in the lessons of Mrs. Katz (*Mrs. Katz and Tush*, by Patricia Polacco a FIAR Vol. 2 selection) as she leaves her home in Poland and how WWII affected Poland. FIAR Vol. 2 also has the story lessons for *All Those Secrets of the World* by Jane Yolen showing American soldiers leaving the United States for areas of action in Europe and the Pacific Basin during WWII. Gently, through these picture books your student is beginning to see the wide scope of WWII. *Hanna's Cold Winter* continues the picture.

These kinds of lessons are often not introduced until the junior high level, but they will give your student a strong foundation for history lessons in the later years! Your student will remember via the story characters some of the feelings of that historic time including feelings of fear, sadness, loneliness, frustration, and loss, flexibility and the creativity of having to "make do."

At this time, if you have an older grade level student, you may want to take the opportunity and find a very simple book on WWII. Begin to tie together all the story pieces your student already knows and give him a *very simple* framework of how WWII began and developed. There are overview WWII lessons in *Beyond FIAR* Vol. 2 & 3.

Social Studies: Relationships and Problem Solving

The Budapest zoo has a problem. The city is experiencing one of the coldest winters ever and with the war going on food cannot be brought into the zoo. Tibor's papa is concerned. Discuss with your student that sometimes people become concerned over an issue and they don't even attempt to think of solutions. They just worry and hope the problem is quickly resolved. However, Tibor's father thinks about his concerns and tries to find a way to help. He comes up with a solution and the family makes a trip to the zoo to share it with the zookeeper. When the zookeeper agrees that the solution might work, Tibor's family (and others) begin to band together to save their beloved hippos. With the help of the entire city and their donations of straw the animals are saved. *Hanna's Cold Winter* showcases people of compassion who are also people willing to go into action! Can your student think of some situations that he has witnessed where someone has seen a problem, thought of a solution and then implemented that solution?

The story doesn't tell us how Tibor's papa comes up with his wonderful solution. It might be that he is trying to think of the all the things hippos eat and just happens to look down at his own slippers! However, the idea comes to Papa, just as ideas can come to each of us. Encourage your student to be looking for problems and creative ways to solve them just like in *Hanna's Cold Winter*! If your student shares such a problem and solution of his own, write it down and include it in your social studies notebook.

Social Studies: History - Six Day Work Week

Talk about the different methods of scheduling a work week. Many jobs today are 8:00 A.M. to 5:00 P.M. jobs. There are also jobs that have three or four shifts including night shifts. There are jobs like firefighting where the employees work a day on, day off, day on and then they are off for a few days because each of their shifts is twenty-four hours long.

It was more common during the time of WWII in Europe and in North America for people to work six days a week, having only Sunday off. Can you help your student make a list of people he knows—family and adult friends that work? Help him chart what type of work schedules they each have.

This is not a critical academic lesson, however it is a lesson to widen your student's knowledge base about the working world, both past and present. If you choose to do it you will be helping him realize the great diversity of work schedules.

Social Studies: Famous Features of Your Area or State

If your student previously studied the lessons for *The Giraffe That Walked to Paris*, *Five in a Row* Volume 2, you might enjoy reminiscing and discussing how much the people of Paris loved La Giraffe. They had signs, decorations, clothing, etc., with pictures of La Giraffe. The people of Hungary loved the hippos, too. That is why many of the people in the town worked together to help save them. Discuss with your student anything that is famous or revered about your town or state. It may not be a particular animal. Perhaps your area has well known types of trees or forest such as the Hartwick Pines area of Michigan, or beloved light houses, etc.

Language Arts: First Person Point of View

Does your student know from what point of view *Hanna's Cold Winter* is written? Does he remember stories like *Five in a Row* Volume 1 selection *Night of the Moonjellies* by Mark Shasha, or *Five in a Row* Volume 2, *Owl Moon* and *All Those Secrets of the World* by Jane Yolen, or *Five in a Row* Volume 3, *The Wild Horses of Sweetbriar* by Natalie Kinsey-Warnoc? All of these stories were written in first-person point of view in which the pronoun "I" is used for the person telling the story.

Now, here is a bit of detective work. There are three children in the family of the story *Hanna's Cold Winter*. Two of these are boys and one is a girl. Ask your student if he knows which of the three children is telling the story. You can find out which one of the three is actually telling the story by making some observations. On the page where the lions are first visible on the Lanchid bridge (across from the Gellert baths) you can read the lines, "My sister…" From this you can then assume that the storyteller is one of the two boys. But, which one? The next page of text says, "My older brother, Gabor…" so now you know it is the younger boy who is telling the story. Where do you first read the name of this boy? When Papa is asking his younger son about the riddle of the lions at the Lanchid bridge he says, "Little Tibor…" So the younger son is named Tibor and it is Tibor who is remembering his childhood and telling the story!

Language Arts: Story Writing - Introduction and Plot

Author, Trish Marx, begins the story of Hanna with the line, "When I was a child..." and proceeds to reminisce about Tibor and this imaginary character's childhood years. Let your student try to pattern a story after this type of introduction. He can begin his story with "when I was a child" and reminisce about his own childhood or he can make up a fictional story using the same beginning as Trish Marx. You may need to remind your student of the elements of plot: conflict, rising action, climax, falling action (or denouement). Can he find these plot elements in *Hanna's Cold Winter*?

Another idea, for your student is to do a reminisce story of his own life based on photographs and incidents he obtains from his parents. This type of story might begin, "When I was two years old..." or "When I was four years old..." and be documented by copies of photographs. In this type of writing, plot would not be as important because the story could just be a running commentary of life incidents. This assignment might be easier and more enjoyable for your younger student.

Language Arts: Literature Genre - Riddles

Riddles are a language genre that has a long history. People love riddles and they have always used the playful art of riddles to encourage creative thinking and humor. Find a good riddle book and enjoy some riddles together just like Papa and little Tibor. If your student desires, he may begin to think of some original riddles to share!

Language Arts: Comparing and Contrasting Themes in Literature

There is a slight **comparative** connection between the story of *Hanna's Cold Winter* and the folk tale *Stone Soup*. Find a copy of *Stone Soup* at your library. Search by title for there may be several different renditions of this old tale. In *Hanna* it says that during the war, their meat runs out, then their potatoes and with only a few vegetables and sometimes a thin chicken Mama stretches the soup pot. Then read the tale of *Stone Soup* and of the story of a man who also wants to stretch his pot of soup. So, both stories have the theme of stretching the soup pot.

Yet, a **contrast** in another theme of these two stories is in the actual implementing of the project. In both stories the community needs to band together to produce the desired benefit. However, the man in *Stone Soup* tricks the townspeople into sharing their vegetables to make his soup, while in *Hanna* the people of the town are willingly persuaded to consolidate their items of straw and give them to help the hippos.

This is not a lesson to labor over but to just suggest that comparing and contrasting themes in literature is helpful in understanding the richness of our literary heritage as well as stimulating critical thinking. As children begin to think in terms of "this reminds me of something in one way, but it is opposite to it in other ways" they are beginning to form thinking skills that will be invaluable in the high school and college years.

Art: Watercolor Illustrations

Barbara Knutson, uses beautiful colors and gentle strokes to produce lovely illustrations for *Hanna's Cold Winter*. Look at the double page picture of the hippo house right after the picture of the family arriving at the zoo. The blues and greens are quiet and peaceful as the hippos peek out from the hot springs. Notice the dappled patterns of gray on the hippos. The varied light coming through the leaves of the trees causes a pattern on the hippo standing by the water.

Don't forget to look at this lovely summer picture and contrast it to the view of the hippo house in winter, eight pages later. In the winter scene the trees are bare, and the pond is frozen. If you add the view from the cover picture you see icicles and snow. What a difference in the feelings conveyed from the summer season to the winter season pictures!

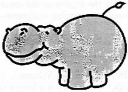
This is a lovely lesson in simple artistic appreciation. If however, you have an artist student perhaps this variety of seasonal illustrations might inspire him to draw or paint several scenes of a particular place each with different seasonal aspects.

Art: Poetry

Here is a poem that your student might find humorous regarding the subject of the Hippopotamus.

The Hippopotamus

Behold the hippopotamus!
We laugh at how he looks to us,
And yet, in moments dank and grim,
I wonder how we look to him.



Peace, peace, thou hippopotamus!
We really look all right to us,
As you no doubt delight the eye
Of other hippopotami.

Anonymous

[**Teacher's Note:** You might take this opportunity to explain to your student what the term **Anonymous** means at the end of a poem, quote or writing. It means that there is no one who is given credit for that writing. It *does not* mean that whoever used the quote didn't do research to find attribution, but rather that the words, themselves, have never been credited to a particular person.]

Art: Comparing Photographs of Architecture With Illustrations

Look for books at your library on Hungary. There will be some selections in the juvenile section and others in the adult section. Try to match photographs that you find

in these books with the buildings, bridges, etc., of the story illustrations. It might also be fun to find a travel video and edit the portions to show your student some of the buildings and places from *Hanna's Cold Winter* that still exist in Hungary today. (There are videos on Hungary that show the hippos, too!)

Also, look at the title page with the sketched drawings of Budapest. Find some of the buildings and sites there. (You can see the zoo, Lanchid Bridge, Gellert Hotel, and the Cog-train.) There are many ways to portray the sights of a city. List some of the different ways such as painting, modeling, photographing, needle working (as in tapestries), etc.

Art: Drawing Villages

On the title page of *Hanna's Cold Winter* Barbara Knutson has sketched the city of Budapest. In the drawing she has included signs which name some of the buildings and sights seen in the story. If you have a copy of Bruce McIntyre's *The Drawing Textbook* (available through school curriculum catalogs) find the picture of his sketched fantasy city. The techniques for drawing McIntyre's city are found within his *Drawing Textbook*. If your student is interested in learning to draw and is inspired by these pictures from McIntyre and Knutson, he can begin to practice the techniques and work on drawing his own towns.

Art: Architecture Lions Bridge and Cover building

Just for enjoyment, notice the architecture in the Lions Bridge, and the beautiful building for the hippos on the cover of the story. These structures have their own beauty, color, lines and amazing sculpture—a world of art for us to enjoy.

Art: Bath Scene - Focal Point Off Center

In *Five in a Row* Volume 1, you may have studied composition in drawings and paintings, where there is a lesson on composition in *The Story of Ping* by Marjorie Flack. If so you may want to review that lesson and the pictures in the book of *Ping*.

In the Gellert Bath scene in *Hanna's Cold Winter* you can see a beautiful room with tiles on the floor, huge columns that flow upward to an arched ceiling, upper hanging terraces and sculptured figures. Isn't it interesting that the little girl (maybe Eva) in her red suit is not in the center of the picture? Often artists will avoid having a main object in the center of their artistic composition. Rather, they will set the main object (people, plants, animals, buildings, etc.) just off-center. They feel it makes a more pleasing composition. Your student is welcome to try drawing, painting or even making a collage where the main object in the picture is off center. However, if this is not an enjoyable project, then just look together at pictures in magazines, art books, etc., and point out examples of this lesson in composition.

Art: Balance and Curves

Look at the last peaceful picture of three hippos together. The view is cut off by a half circle of sky at the top. This half circle curve is repeated in the hind quarters of the

lower left hippo and the shoulder of the hippo lying on the ground facing the viewer. The curve is also repeated in the fence.

How do you take three hippos, each in a different position, and bring balance to the painting? Knutson does achieve a **balance**. The mass weight of the right side standing hippo head plus the entire mass of the facing hippo body manages to balance the length and mass of the two left side bodies. Art takes thought. Art takes manipulation to achieve a desired effect.

Have your student take some plastic animals, set them up and look at them from different angles. Have him think of how a picture of these animals would look. Now have him think about balance and let him try to place three animals in such a way that a balance is achieved. (Since hard plastic animals cannot be bent—claymation animals would be even better for this—your student will have to imagine how an animal's head turned a different way could help create a balance, etc.) If he enjoys this kind of thought process he might want to try with five animals, then seven. The animals do not have to be in a bunch. Two small animals on one side could balance a larger animal further away.

Art: Music - Classics

You can explore some musical classics along with your study of *Hanna's Cold Winter*. Franz Liszt (1811-1886) was born in Raiding, Hungary. He eventually went to Paris to study and developed several important musical forms such as the **rhapsody** and the **symphonic poem**. He used **leitmotif** (lit mO teef) which is a recurring theme (representing a person, idea or event) in his musical work. If you would like, find some musical compositions by Liszt. You might begin with *Hungarian Rhapsodies*. In this musical piece you will hear the influence of the Hungarian folk music.

Also, you can tie music to *Hanna's Cold Winter*, through a famous piece of music called "The Blue Danube Waltz" ("On the Beautiful Blue Danube") by Johann Strauss, Jr. (1825-1899) Strauss lived in Vienna, Austria, one of the countries through which the Danube River flows. (So while Strauss wrote of the Danube in Austria, you can still tie the river itself to this story as the river also flows through Hungary). Listen to this beautiful **waltz** and think of the Danube flowing from Germany through Austria, Hungary and other countries as well. Isn't it interesting all the variety of subjects that inspire works of music, poetry, writing, painting, etc.? In this case, Strauss must have loved the Danube and this river formed the inspiration for this famous waltz.

If your student is interested he may want to use crayon, colored pencil or watercolors to make a picture. Let the music from the "Hungarian Rhapsodies" or "The Blue Danube Waltz" influence him to fashion a work however he is inspired (even as just flowing lines) as he listens.

Science: Peppers, Paprika

(**Teacher's Note:** In this lesson we are not talking about the small berry that makes the spice called black pepper or white pepper, but rather the family of capsicum plants which produce the green and red peppers we use cut up in salads and for Chile powders and paprika.)

Purchase several different colors and/or shapes of peppers and begin your lesson on this plant by letting your student see the variety. Or take your student to a market where a good variety of peppers are sold. (If there are no markets near you, a good seed catalog will have pictures of peppers of different kinds.)

Paprika is prepared by grinding up the dried pods of a capsicum pepper. The resulting seasoning is not as hot as cayenne pepper. It retains a beautiful red color and is used for seasoning and coloring in many recipes as well as for garnishing foods. Show your student a bottle of paprika, if you have one to bring to your classroom or point out this seasoning at the store.

Science: More Friction or Less Friction and Ways to Solve the Problem

Friction is a force that acts to oppose two objects rubbing together or over each other.* If you try to rub two pieces of large grained sandpaper against each other it will be difficult. In contrast if you try to rub two pieces of typing paper together it is less difficult because the smoother paper creates less friction than the rough sandpaper.

In the same way the wheels of a traditional train are smooth and the rails are also smooth. Most of the time the massive weight of a locomotive bearing down provides enough friction and allows the train to move quickly and effectively even though the wheels and rails are smooth. However, in the cases where engines have to pull a train up a very steep grade (incline) the smooth wheels can begin to slip and the train may be in danger of beginning to roll backwards. To overcome this problem of **lack of friction** the cog-railway has toothed gear-like wheels that mesh with the toothed rails and provide the engine with the ability to pull a train up a steep hill without the chance of slipping back.

Friction is an interesting phenomenon. Sometimes you need it and sometimes you want to alleviate it. In the story of *Mr. Gumpy's Motor Car* by John Burningham presented in *Five in a Row* Volume 2, more friction is needed. Ask your student if he remembers that Mr. Gumpy's car is stuck in the mud. The slippery mud does not offer enough friction (or traction) to move the car forward. How do the story characters solve their problem? (All the riders have to push the car, but if they had found some, they could also have sprinkled sand or gravel under the tires to increase the friction.)

In *Hanna's Cold Winter* the railroad has a similar problem. More friction or traction was needed. But in this case builders overcame the problem with a special set of tracks and wheels to help the train move up hill safely.

Talk about other times where instead of increasing friction you want to alleviate it to reduce noise or reduce wear and tear on metal parts or to make an object easier to move, etc. (Like the squeaky hinges on a door, moving parts in a car's motor, a competition swimmer.) How do you cause two items to have less friction between them? There are two simple ways. One way that your student can remember easily is to use a lubricant like oil or water. He can feel the difference that a lubricant makes as he notices the difference between rubbing his hands back and forth quickly before and after he uses

hand lotion. Many different types of oil are used to reduce friction in a variety of applications. Another way to reduce friction is to make the surfaces moving against each other smoother. In ice skating, the ice is scraped to reduce bumps and pits till it is as smooth as possible and the skater's skates are kept ground and smooth. Also, the weight of the skates on the ice causes a thin film of water to form between the rink and the skates. With these things together, friction is reduced and the skater glides smoothly. In swimming competitions, friction is reduced when swimmers wear tight fitting swim caps and suits and even some types of goggles. Male swimmers even shave their chest, arms and legs to reduce the friction caused by millions of hairs passing through water.

***(Teacher's Note:** Friction also produces heat. If you desire you can incorporate this fact into the lesson above.)

Science: Geology - Hot Springs

The hippos in *Hanna's Cold Winter* are able to make use of the hot springs area at the Budapest Zoo. The warm waters of these springs are thought to be helpful in creating an environment that encourages hippos to bring up offspring (something not usual to these animals in captivity).

But, you might ask your student, how do waters become hot (or warm)? Hot springs occur when underground water is heated by areas of hot rock or lava deep in the ground. There are many areas of hot springs in the United States. Try an Internet search on "hot springs" and see what you can find, look especially at entries for Arkansas, and Yellowstone National Park.

Science: Zoology - Hippopotamuses

The name "hippopotamus" comes from two Greek words that mean "river horse." (The Greek word for horse-hippos and the Greek word for river-potomos). If you could see a cut away view of a river, you would be able to understand how this name might have come about. Hippos run, just like horses, on the floor of the river—underwater. They actually look like horse galloping along the river bottoms, but of course they do have to come up for air. Hippos can stay underwater for as long as six minutes.

Even though the name and actions are reminiscent of horses, and they can run up to twenty miles per hour on land, hippopotamuses are more closely related to the pig! Adult hippos reach lengths of fourteen feet and up to five feet in height, weighing as much as eight thousand pounds. (An average four-door car weighs approximately three thousand pounds.)

Hippos use a variety of grunts, growls and screams underwater in order to communicate with each other. They are plant-eating (**Herbivore**) animals, with mouths that can open nearly four feet wide. Baby hippos called calves are born underwater. Hippos can live up to forty years.

The scientific name for the largest hippopotamus is Hippopotamus amphibious. Why does your student think the last part of the name is applicable? (A hippo is *not* an amphibian, but it is **amphibious** in that it can *travel* on both land and in the water. Perhaps your student knows this word in regard to military vehicles that can travel over land and also across water? The adventure rides called The Duck (also spelled Dukw) are a form of these same military vehicles.)

Remember from your studies of the story *The Giraffe That Walked to Paris*, written by Linda Milton, how much the people loved La Giraffe? The people of Buda and Pest loved their hippos as well! (Lessons for *The Giraffe That Walked to Paris* are found in *Five in a Row* Volume 2)

Science: Discovering Zoo History

Since ancient times man has kept wild animals. Rulers of Egypt, China and others displayed their wealth and power through personal collections.* The first public zoos were begun in Greece, and the oldest public zoo still in existence is in Vienna, Austria. It opened in the mid-1700's. The zoo from our story *Hanna's Cold Winter* opened in 1868 and is still in operation.

The study of zoo history is interesting. Throughout history some zoos were not run with efficiency, nor with compassion for the animals while others were run quite well. Even today there are some zoos that are better than others, especially from the animals' points of view. How and why zoos began, the first children's zoos, when animal care discoveries were made (such as the invention of the moat-type caging rather than metal cages), feeding and care of animals, breeding and caring for animals that risk extinction and many more topics are waiting for an interested student who desires to do some zoo investigation.

Remind your student that the word **Zoology** is the study of animals. Zoology and **Botany** (the study of plants) together form the branch of science called **Biology**. It is easy to remember what Zoology means when your student thinks of zoo!

*Remember in the *Five in a Row* lessons for *The Giraffe That Walked to Paris*, written by Linda Milton, that the ruler of Egypt sent the giraffe to the King of France who kept her in a zoo, or in French, a ***menagerie***? This zoo in Paris is the third oldest public zoo in the world that is still in existence.

Bible Lessons

In *Hanna's Cold Winter*, the townspeople, inspired by Tibor's father, work together. By doing this, they are able to do what they could not have done alone—save the hippos! We use the word cooperation for this kind of "working together" on a project or goal.

This reminds us of a similar event in the Bible where many people had to work together (cooperate) to rebuild the walls of Jerusalem. Find this story in Nehemiah chapters 3 and 4. These men worked hard for the common good of the city and accomplished their goal, even under a great deal of discouragement from unfriendly sources!

Nehemiah 3 & 4

❧ ❧ ❧ ❧ ❧

Proverbs 12:10 reminds us that a wise man is kind to his animals. Tibor's neighbors had regard for the suffering animals and worked to help them. Even those who did not recognize the Lord or his Word, still when they did the right thing, they reaped the reward of having the animals in their town.

Proverbs 12:10

❧ ❧ ❧ ❧ ❧

When Papa tells his children about the hungry hippos at the zoo, the children begin to think about how much they love these animals and when they go to bed that night, the story says they feel helpless and sad. Discuss with your student what you can do when you are feeling hopeless and sad. The Bible says With God all things are possible (Luke 1:37) and that is a good place to begin to let sadness and despair lift! God is the God of hope and we should never lose hope that He will hear us in our times of need. Philippians 4:6 says to be anxious about nothing! But rather to pray and thank God for what He has given and then tell him what you are worried about and what you need. Then it says in verse 7 that the very peace of God will keep your mind and heart in Christ Jesus. That way Tibor and his siblings should be able to have a sweet and peaceful sleep, knowing that the Lord cares for them and that He knows about their worries.

Luke 1:37

Philippians 4:6

Philippians 4:7

❧ ❧ ❧ ❧ ❧

Studying *Hanna's Cold Winter* gives you the opportunity to learn about Hungary. In the manual lessons you learn about the geographical location, but now you can use this time to learn about prayer needs for this country and with your student, remember the people of Hungary in your prayers.

Romans 15:5

1 Timothy 6:11

Tibor and his siblings want to go to the zoo. But they can't go just whenever they wish, sometimes they have to wait for that particular activity. Romans 15:5 says that it is God who can give patience and encouragement to those who need it. 1 Timothy 6:11 says to flee what is bad and **pursue** faith, righteousness, godliness, love and **patience** (perseverance or endurance) as well as gentleness.

A MAIN COURSE FOR AFTER AN EXCITING DAY AT THE ZOO

Below you have a choice of two main course dinners that are traditionally Hungarian. In fact, often in cookbooks the Goulash is listed as Hungarian Goulash. Both of these recipes can be accompanied by a salad. Don't forget dessert–an ice cream cone, just like you might find at the zoo!

Chef's Corner: To Soak Chicken in Brine: Rinse chicken thoroughly. Dissolve 1/4 cup kosher salt in 1 quart water. Place chicken in a resealable plastic bag. Add salted water, reseal and refrigerate about 30 minutes. Being in the brine will make the meat juicy and tender!

Chicken Paprikash

2-1/2 lb. cut-up chicken, which has been soaked in a brine and rinsed thoroughly (see Chef's Note above)
1 tablespoon mild Hungarian paprika
3 tablespoons shortening
Salt and Pepper to taste
1 cup yellow onions, finely chopped
2 cloves garlic, minced
2 cups chicken broth
1/2 cup sour cream
2 tablespoons flour

Melt shortening in a large skillet over medium heat and sauté onions until translucent. Add garlic, cook one minute more. Remove pan from heat, add paprika, being careful not to burn this spice! Remove chicken from brine, **rinse thoroughly** in clear water and pat dry with paper towels. Season chicken with salt and pepper, add to skillet. Mix to combine paprika-onions with chicken. Return skillet to stove, adding just enough broth to prevent chicken from burning. Bring to a boil, then cover and simmer for about 30 minutes on top of stove.. Remove chicken from skillet. Add remaining broth if desired. Scrape brown bits from bottom of the pan. In a small bowl, mix the sour cream and flour together until smooth; add some of the warm gravy from skillet. Whisk sour cream-flour mixture into skillet to create a thickened gravy. Season to taste with salt and pepper. Return meat to skillet and heat through, but do not boil. Serve the chicken paprikash over dumplings, wide egg noodles, or rice.

Hungarian Goulash

2 lb. beef chuck
1 tsp. salt
2 onions, white or yellow, chopped
2 tablespoons shortening
2 Tbsp. imported sweet paprika (if at all possible, use imported Hungarian paprika!)

2 bay leaves
1 Qt. water
4 peeled and diced potatoes
1/4 tsp. black pepper

Cut the beef into 1 inch squares and simmer with 1/2 teaspoon. salt. In a saucepan over medium heat, saute the chopped onions in the shortening. When the onions are translucent, add the beef cubes and paprika. Cook the beef over medium heat for 5 minutes and then turn the temperature down to low. Let the beef simmer in its own juice along with the onions, salt and paprika for 1 hour. Add water, diced potatoes and remaining salt. Cover and continue to simmer until potatoes are done and meat is tender. (Approximately 15-30 minutes). Prepare egg dumpling batter:

1 egg
6 Tbsp. flour
1/8 tsp. salt

Add flour to unbeaten egg and salt. Mix well. Drop by teaspoonful into Goulash. Cover and simmer 5 minutes after dumplings rise to surface. Serve the goulash immediately with large dollops of sour cream.

(**Note:** For fun, buy a can of Potato Straws at your grocery store. They shuld be in the potato chip section. Have them as a snack, or sprinkle them around the edgess of the bowls of goulash to remember the straw that the hippos ate during the war!)

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	The Hatmaker's Sign : A Story By Benjamin Franklin
Author:	Retold by Candace Fleming
Illustrator:	Robert Andrew Parker
Copyright:	1998
Summary:	Benjamin Franklin tells a story to try to mollify Thomas Jefferson, as Jefferson fumes over his own writing being changed!

Social Studies: U.S. History - The Declaration of Independence

(Teacher's Note: Before you teach this lesson, take a few minutes to read the Declaration of Independence in its entirety. You may be amazed at the patriotism, language and power evident in this important document. Let the magnificence of the message sink in and you will have an infinitely better time teaching about it. Your student will catch your excitement. Remember, too, that the ideas presented in this document were common ideas of the time among certain philosophers in Europe, but were penned eloquently and actually put to the test by Jefferson and the others involved in the drafting of the Declaration. As a side note: Jefferson took two weeks to write this document!)

Remind your student that the main portion of *The Hatmaker's Sign* centers around a story told to Thomas Jefferson by Benjamin Franklin. Yet, the story is told because Jefferson's feelings are hurt as he is attempting to write the Declaration of Independence. Take this opportunity to discuss with your student this particular document and the importance of its words.

The Declaration of Independence is a work that can easily be divided into several parts. The first part is the introduction, sometimes called the preamble, which is a paragraph explaining why the patriots felt it necessary to create such a document.

In the four following paragraphs the writers declare certain rights they believe every man is born with—rights that, in their opinion, should be respected.

Next, the writers of the Declaration describe (or name) the person and government with whom they have grievances, King George the Third of England. And following this indictment there is an actual list of offenses that have caused many of the Colonists to

believe that separating from England is the only way to have the rights and freedoms they desire.

The concluding three paragraphs are the ones that say how the Colonists have tried to obtain relief from the grievances, but failing that, declare that the colonies are now free from any allegiance to Great Britain.

(**Teacher's Note:** You may wish to read small portions of the actual document to your student. However, it is more important for this older end of the *Five in a Row* age group to be *introduced* to the fact that there are four sections of this document and for them to begin to understand why such a document was written, than to hear every word in it. This is also a wonderful opportunity to find a "minute book" in the Dinah Zike *Big Book of Books* to illustrate the four parts of the Declaration of Independence. Look through the book and find a four-part fold booklet and have your student make it and write the four parts [or identifying divisions] on the areas provided. These four portions would be: preamble, rights, grievances, declaration.)

The Declaration of Independence and the Constitution of the United States are both important documents. It is good to study the Declaration of Independence to understand why Colonists thought they should be free. In later years your student will study the Constitution to find out *how* the Americans thought this life of freedom could be accomplished.

Social Studies: The Pain of Separation

This lesson has no direct reference in the story *The Hatmaker's Sign*. However, it is important when teaching about the Declaration of Independence and the times surrounding the writing of this document to help your student ponder the excruciating emotions that colonists were experiencing. Many colonists did not want to separate from Great Britain. They only wanted their rights and freedoms respected. They thought, given enough time, that things could be worked out and many did not want to cease being English! Neighbors were often on different sides in this debate. Even families were split apart with some favoring independence while others wanted to stay loyal to the crown of England. (The people who remained loyal to England were called **Tories** or **Loyalists**).

A good story that demonstrates the strong emotions of this Pre-Revolutionary War period of history is called *Katie's Trunk* by Ann Warren Turner. In a storybook format, your student will begin to feel the trauma of that time experienced by this family who was loyal to the crown.

In years to come, the reasons for the volatile feelings during the Revolutionary period will be better understood, but for now just mentioning these concepts to your student and possibly reading *Katie's Trunk* will be enough.

Social Studies: Geography - Boston and England

There are several learning opportunities for geographic topics when studying *The Hatmaker's Sign* First the New England area, especially Boston, Massachusetts, and then

England, where the Declaration of Independence would be sent. Neither the King of England, George the III, nor the country itself is mentioned in Fleming's story, yet it is a natural tie-in topic since the document Jefferson and the others work so hard to write is sent to this specific audience.

The geographic locations of New England and the Boston, Massachusetts area may be a review if you completed the *Five in a Row* Volume 1 lessons in *Make Way for Ducklings* and *Paul Revere's Ride*, lessons in *Five in a Row* Volume 3. If this is the first exposure to the area, help your student find Boston, Massachusetts on a map of the United States. There are two story disks for *The Hatmaker's Sign*, first story disk—the one with the Declaration open will go on Boston, MA. on your map. Check *The World Book Encyclopedia*, under Boston, for additional information and maps of this important city in United States history.

To introduce England find this country on your map and place the other story disk (the one with the document rolled up) on England. Attach a thread or string, looped from the first story disk to the second. Looking at the map with these two story disks, can your student see how the Atlantic Ocean, that divides England and the United States and which made it difficult to manage a war, troops, supplies, etc. over great distance, played a part in the success of the American colonists' fight?

Social Studies: Issues in Human Relationships - Character

It might be interesting for you and your student to trace signs of John's character as he deals with the people who give him their opinions on his sign. First, John listens politely to his wife. Then he tips his hat to the Reverend respectfully. Then he politely kisses the gloved hand of the Lady, and then lawfully hands over his sign to the magistrate, while bowing to him. In these actions he is both obedient and respectful even though the magistrate is quite a difficult man. Later John gives the boy apprentices some money for their help, showing that he is generous and kind. Then professor receives a hearty handshake. All in all, John behaves admirably with the exception perhaps of his sighs. The more often this story is re-read the more admirable the character of John and his dealings with these various people becomes. His troubled day comes to an end, however, when at last he reaches the sign maker's shop and the sign maker comes up with just the perfect words!

Social Studies: Colonization

(**Teacher's Note:** The subject of colonization is a fascinating one. Many countries have colonized different parts of the world for their own benefit. The histories surrounding various colonial attempts are full of color and action. Perhaps by explaining how the American Colonies were founded and later obtained their freedom, your student will recognize other colonial interests as he continues his studies of history.)

Talk with your student about the men writing the Declaration of Independence and how strongly they desired to be free from English rule and government. Does your student remember how England came to have influence or control over the Colonies? (Jamestown and Plymouth were both founded by English citizens.* They colonized [established towns, roads, civil authority, etc.] a portion the eastern coast of the New World or

North America in what is now the United States.) The finances and government of a colony are controlled by the "mother country." In order for a colony to become free, it must receive its freedom in an agreement from the founding country or fight the founding country to try to gain its freedom. Most "mother countries" do not wish to lose their colonies because they were originally founded to be a resource for land, and raw materials, precious minerals, agricultural crops, trade goods, etc.. In simple terms, a valuable colony increases the "mother country's" riches and therefore there is no desire to grant them freedom.

*There were other parts of the American Colonies which were settled by the Dutch and Swedish settlers. Those small colonies however were taken over by the more powerful British interests.

Social Studies: History - Benjamin Franklin

(**Teacher's Note**: Benjamin Franklin will be covered in wonderful biographical detail in the lessons for *Betsy Ross* in *Beyond Five in a Row* Volume 1. The following lesson will just *introduce* his name and put him in historical context during the days of the American Revolution, and the signing of the Declaration of Independence.)

It may be interesting for your student to consider that the kindness and compassion Ben Franklin shows to Thomas Jefferson as he notices Jefferson's hurt feelings and tries to tell him a story to help out, is the same kind of character that served Franklin well as ambassador to the United States. Franklin was able to meet with heads of different governments and understand the feelings of all the parties involved in governmental negotiations. He also had a great deal of wisdom to impart to the various governments, but knowing how to meet certain person's feelings is an important part of statesmanship. Whether your student can understand this now or not, it is good to mention and in later school years you can remind your student of the story of *The Hatmaker's Sign* and review the concept of **statesmanship**.

Social Studies: History - Apprenticeships

As John carries his sign through the town, he nears the Charles River and a breeze snatches the parchment paper from his hands. The paper, with John's ideas for a sign, lands at the feet of two apprentices. Does your student already have an idea of what an apprentice is?

The history of apprenticeships begins long before life in the American colonies. But in America, an apprentice was a person who would legally bind himself to a master for the purpose of learning a trade. This binding was a legal agreement stating that the person would work for the master (learning a trade—such as printing, silversmith, carpentry, etc.) for a specified number of years. The agreement usually included room and board for the apprentice, and perhaps a small wage.

A good read-aloud book for this lesson might be *Carry On, Mr. Bowditch* by Jean Lee Latham. Biographies of Ben Franklin and Paul Revere's life may have information on their apprenticeships as well.

Social Studies: Character Relationship - Human Nature

In *The Hatmaker's Sign* we see that Thomas Jefferson has worked hard to write the Declaration of Independence. He does not like the members of congress trying to change it. Jefferson's feelings are normal. Basic human nature (especially where the creative process is concerned) is to reject change to one's special projects. This may be acceptable for art projects or a story or song, but a document like the Declaration of Independence which would affect so many people across two continents, needs many minds working and thinking together. Discuss with your student the fact that there are certain times when no matter how great your own personal creative effort is, you need to be able to share a project with others.

Then ask your student if he had been Jefferson, or been in a similar situation as Jefferson, if he can imagine how Jefferson might have felt? Whether or not Franklin's story helps Jefferson, does your student think that Benjamin Franklin's story would have helped soothe *him?*

Social Studies: Fashion - Hats

The Hatmaker's Sign reminds us of hats! Throughout history there have been many different kinds of hats as the fashions have come and gone. There are so many types of hats that are historic and cultural. Just think of costumes depicting the different times of history and countries of the world. You might even consider the crown worn by the King of England when he received the Declaration of Independence! Yet, a crown would not technically be considered a hat because a hat is defined as: having either a cap or hat type of style—and being made with a brim or without. Below are listed some types of hats and you and your student could add to this list if you'd like. Your student might enjoy illustrating the list as well:

Tricorn-the three cornered hat worn by men during the Revolutionary times
Top Hat-a tall hat, sometimes call a stovepipe hat because it looked like a black stovepipe
Coonskin Cap-worn by early American settlers and trappers
Beret –a French hat that is soft, round, and made without a brim.
Western or cowboy hats including Stetsons
Baseball caps-having a crown, but a brim only on the front

Then of course, there has been an exciting array of women's fashionable hats made over the years by milliners (makers of hats for women). With your student look at the two types of hats worn by women in *this* story.

For further study: The illustrations for *The Story About Ping* show a man in China wearing a large round straw hat. Also in *Grandfather's Journey* there are several different kinds of hats, including a hat called a Bowler. Think of the hats in the book *Wee Gillis*

or *The Story of Ferdinand?* (Lessons for *Fing* and *Grandfather's Journey* are found in Volume 1 of *Five in Row*. Lessons for *Wee Gillis* and *The Story of Ferdinand* are found in *Five in a Row* Volume 2. It might be fun to go through the stories you have used with *Five in a Row* just looking at the variety of hats! *The World Book Encyclopedia* has a colorful and interesting section called "Clothing" which shows a great many native costumes with the attending head coverings!)

You might share with your student the common saying, "My hat's off to you." This saying is a commendation meaning that someone has done a good job, or has had a good idea or has in some way distinguished himself and thus is worthy of the respectful gesture. There are also several common points of manners concerning the proper use of hats: they are to be removed indoors, tipped to a lady as a sign of respect, removed during eating at the table, and during prayer—even outside, etc.

Social Studies: History - Institutions of Higher Learning - Harvard

Harvard is a very old university. It is the oldest school of higher learning in the United States. It was founded less than twenty years after the Pilgrims landed at Plymouth! *The World Book Encyclopedia* has an interesting article on this university and your student might like to find several interesting facts there to write down about its history and location. The main purpose of this exercise besides a little research is that your student might know something about Harvard when he hears this famous school mentioned.

Language Arts: Public Speaking - Debate

From the last page of the story, remind your student that Jefferson watches, the Continental Congress argue and debate the wording of The Declaration of Independence. Ask your student if he has ever heard of a **debate?**

When someone uses the word debate, he may just be simply presenting the sides of an argument, as in a family discussion. But a formal debate is interesting as well. In a formal debate there are two or more speakers, each of whom will champion one side of a previously chosen issue. The speakers are expected to research answers to their side of the issue (this can be either a "right or wrong" opinion issue,* or a "how can this situation be best changed issue," where the debaters are searching for the best solution to a problem.) Though the speakers will debate or give speeches for one side only, they need to know about and understand both sides of the issue they are debating. These speeches are to be convincing so that the judges (if the debate is being judged) will choose (in the judge's opinion) the side that has been presented the most effectively.

An eight year old is probably too young to work on a formal debate, but it is fun for him to know what a debate is, and have an idea of what "debating an issue" means. However, if there is *true* interest, your student could create an exercise by choosing an issue and think up some good points of argument for each side. It may humor his imagination to think of trying to develop an argument for *both sides* of an issue. Your student may find that he has strong feelings about one side of the issue, but it is still a good exercise think about and look at the subject from a different point of view than his own.

(Issues might be something like: Is It Beneficial To Continue Schooling Through the Summer? Or Chocolate: Is It Nutritionally Beneficial? (The Chocolate issue will take some definite research. The Internet provides some up-to-date ideas on nutrition that an older encyclopedia might not offer.) Or Sports: A Positive or Negative Influence in the Grade School Years?

Language Arts: The Creative Ego

Ask your student if he has ever felt like Jefferson did in *The Hatmaker's Sign*. Has your student ever written something he thought was wonderful and just perfect, only to have someone suggest that he change this word and add that one? How did this make your student feel? You might take this opportunity to discuss how writers often feel very protective about their personal work.

Ask your student if he thinks that a document as important as The Declaration of Independence should be the work of only one man. Perhaps, even if that one man's words were eloquent, there needed to be more minds at work on such an important paper. Nevertheless Jefferson *did* feel hurt that his words were not chosen without revision! That is part of a writer's creative ego.

The Declaration of Independence was very important and it did have revisions made to it, but what about the writing of your student. Does he find it hard to see corrections and additions made to his work? Discuss with him the reasons why a teacher might make suggestions regarding a student's work. (In the most simple terms a teacher is trying to teach. And what a teacher is trying to teach, is how to communicate effectively. If your student desires to take a great idea or story and send it across the country for someone to read, he must follow certain rules of spelling and grammar so that the reader can quickly understand it. A good teacher wants to help her student learn these rules so that the student's writing—for the rest of his life—will be highly effective.) Does your student think that this explanation helps when it is *his* work that the teacher is suggesting be changed or revised?

Language Arts: Writing, Revisions and Polishing

[**Teacher's Note:** The following is an introductory lesson. That means that the material is advanced for this age group and is only to be introduced as an *interesting idea* so that in years to come, the lessons will seem familiar and enjoyable.]

In the story of *The Hatmaker's Sign*, Jefferson uses up many quills and as he scribbles, and struggles to find just the right words. Most good writing begins as a rough draft or rough copy where the writer is just setting down his ideas without any regard to phrasing, spelling or correct punctuation. After this initial creative process the real craft of writing continues! A good writer will re-read his work, check for sentence fragments, misspellings, run-on sentences, and think of a better word to exchange for a less descriptive one.

Most writers want their work quite clear and concise. Someone long ago put it like this:

"The written word should be
Clean as bone
Clear as light
Strong as stone.
Two words are *not*
As good as one."

Anonymous

Discuss with your student that finding that the perfect word is like a treasure hunt. Eventually your student will learn about a special book called a **thesaurus** which gives **synonyms** (words meaning almost the same) as well as some **antonyms** (words that are opposite). A thesaurus is often introduced at the jr. high level, because it takes a good working vocabulary to use one. As an introduction only—just so your student will have heard of the topic, show your student a thesaurus (tha sawr us). Roget's Thesaurus is a well known one. You can buy a good thesaurus in paperback, while some computer software has its own built in. Using the thesaurus, together with your student, find a word like "marvelous" and let him see how many words might be used instead. A thesaurus is used when one is writing and knows a certain word, but feels that there is a word almost like it that would be even more expressive. Not only would a person need to know the meaning of his original word, but he must also recognize the subtle meanings of the synonyms to be able to choose the one word that would be most effective. For that reason it is not usually expected that a student use this particular resource until junior high.

Since the routine use of a thesaurus by your student is still probably far away, instead as vocabulary building exercises, spend time playing games with vocabulary words, doing simple crossword puzzles. In addition, playing some simplified versions of the parlor games that use synonyms, and playing scrabble with simple words are more ways to help your student strengthen his vocabulary.

Now your student can understand that the endless hours Thomas Jefferson puts in on his writing of the Declaration of Independence stems from the fact that he is, indeed, a great and careful writer—a writer who loves his craft and takes time to find good words and phrases. However, with the weight of responsibility of this particular document, the other men involved thought it most important for Jefferson to share the work with them.

Language Arts: Literary Illusion

Your student may have caught and understood the allusion made from the author's choice of the Reverend's name: Reverend Brimstone. If not, you might want to take the time to introduce the topic of the "fire and brimstone" sermons of the day. A name that is associated with this style of preaching is Jonathan Edwards, who was born in 1703. He was an influential thinker, philosopher, and preacher. Though he died in 1758, eighteen years before the writing of the Declaration of Independence, his "fire and brimstone"style

sermons are still remembered and his influence is still felt by the people during the revolutionary period of the United States. From this story, *The Hatmaker's Sign*, it will be easy for your student to learn that the lifetime of Jonathan Edwards and the Revolutionary times of the U.S. came close together in history.

The actual word brimstone is a type of sulfur—a yellow substance, which is quite flammable and burns with an unpleasant odor. Fire and brimstone sermons used these kinds of references to malodorous burning to influence people against the evils of hell.

(There is another interesting choice of names in the character of the Professor Wordsworth. Though there is an English poet named Wordsworth, and the author might have been thinking of him, this choice of name could also have resulted from a play "on words." The Declaration of Independence is certainly made up of words, and a Professor at Harvard teaches with words, sort of like "word smith." It is **ironic** that Professor Wordworth was the one who thought John's sign was right *without any words at all*!)

Remind your student that he can use various interesting names of history that are connected, through an allusion, to give humor or interest to any story of his own.

Language Arts: Repetition

Can your student find the repetitious words in the story *The Hatmaker's Sign*? Read it again if necessary while he listens for the author's use of repetition.

At the beginning of the story Thomas Jefferson is happy. He has finished writing a document that is going to be sent to the King of England. The author said Jefferson wrote "The words that rang, the sentences that sang, and the paragraphs that flowed with truth." At the end of the story, it says that Jefferson listens "as the Congress argued over the words that rang, the sentences that sang and the paragraphs that flowed with truth."

The author of *The Hatmaker's Sign*, Candace Fleming, chooses to use repetition to tie the beginning of her book to the ending. Repetition is a choice writers sometimes make to add interest and familiarity to their writing. The use of this particular device works especially well in *The Hatmaker's Sign* because the real-life story (of Jefferson writing the Declaration of Independence) needs to be tied together. In this case the repetition regarding Jefferson's writing helps separate the true story from Benjamin Franklin's helpful tale.

Language Arts: Writing's Components - Words, Sentences, Paragraphs

The men who wrote the document called the Declaration of Independence were all educated writers. They had learned that writing begins with ideas that are put into words and the words are then connected together into sentences. Sentences have a subject and a verb and sometimes other parts of speech as well. Sentences that cover the same idea are placed together in paragraphs. Many paragraphs go together to make a long document like the Declaration of Independence.

With your student, think of an idea that you wish to express. (An idea perhaps about how much fun birthday parties can be.) Think of words that would be expressive for your subject and write them down. For example birthday cake, games, friends, gifts, ice cream, laughter, candles, etc. Then write some sentences about these words and make your first sentence the topic sentence. (For example): *Birthday parties can be full of fun.* Have the rest of your sentences follow the topic sentence. Then help your student decide in what order to place the sentences. Together, make up a sentence that restates the topic for a closing (such as "I love everything about birthday parties!"), and you'll have a paragraph!

Now and then, do a similar little exercise with your student, and he will soon learn the way paragraphs are put together and how ideas can be expressed in an orderly way. (Obviously there is more to this lesson for upper grade level students, such as compound sentences and phrasing for interest, but this is a sufficient introduction for this age level student. Remember that your student will unconsciously learn a great deal about grammar from having good literature read to him as well as from the good books he reads himself.)

Language Arts: Storytelling

Remind your student that there is a story inside the story in *The Hatmaker's Sign*. The author, Fleming, has written a true story about Thomas Jefferson and the men that wrote the Declaration of Independence. Yet, within this story there is *another* story that Ben Franklin tells to Jefferson.

What elements does your student think make a story good? Does your student like a humorous story, a story that teaches or makes a good point, or a story with interesting characters? Does your student like the story that Ben Franklin told to Jefferson about the man who sold hats? Does he think this story was humorous? Does he understand and appreciate the lesson Franklin was trying to make? Does your student think the characters in Franklin's story were interesting?

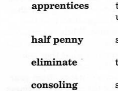
Together with your student, brainstorm a story that has some humor, makes a point and has interesting characters. (Remember the characters can be people, animals or something made up and entirely imaginary.) Have your student write his story down or use a cassette tape recorder to record his tale.

Language Arts: Vocabulary

debate	two people each arguing a different side of an issue
quibbled	to bicker, argue or criticize over seemingly insignificant issues. (In this case Jefferson thought the arguments insignificant but the others did not.)
slumped	slouched over, as over a desk
sympathetic	feeling sorry for someone

cobblestone	rounded rocks that were used to pave the streets before asphalt and concrete
parchment	paper that was used for fine documents—a paper that is not readily absorbent so that the ink used for the documents does not spread out and blur, but stays clear and easy to read.
quill-pen	a pen made from the large wing or tail feathers of a goose
elegant	splendidly beautiful or luxurious
stockade	similar to a jail, on military property, during the Revolutionary times
delete	to remove or take away
magistrate	a British official
apprentices	those who learn a trade from an experienced craftsman, under contract
half penny	small unit of English money
eliminate	to take away
consoling	saying words of comfort
tricorn hat	a three-cornered hat

Art: Comparing Artist's Styles



Robert Andrew Parker uses ink and watercolor to create illustrations that are accurate and beautiful for *The Hatmaker's Sign*. Your student might enjoy making a small picture of an object like an apple or pumpkin, etc., where he can draw this still-life type drawing with permanent ink, let it dry. Then have him work on painting the object with some watercolors. Remind him he will want to make light pen marks, and to use random broken lines rather than thick black ink lines. When he is painting, he may want to shade one side of the fruit making it a bit more deeply colorful than the other lighter side using rounded brush strokes to give the object dimension.

The illustrations by Robert Andrew Parker in *The Hatmaker's Sign* are somewhat like those in *Mr. Gumpy's Motor Car* by John Burningham. Burningham's story is a *Five in a Row* story selection in Volume 2. If you still have access to that book you might enjoy looking at it with your students and comparing the illustrations. There are a couple of other artist/illustrators that you might also like to compare with Andrew Parker.

E. H. Shepard drew black and white ink illustrations for the stories of *Winnie the Pooh*, and *The House at Pooh Corner,* and Edward Ardizzone drew pen and ink art (and watercolor) for his Tim books: *Tim to the Lighthouse*, *Tim in Danger*, *Tim's Last Voyage*, etc. You can usually find the books illustrated by these two artists in the children's section of your library. Any one or all of these artists can be compared and contrasted to Robert Andrew Parker. What does your student think are similarities in their works and what does he see that is different? Which illustrator does he enjoy the most? Why?

Art: Sign Making - Advertising

Signs are everywhere! They appear as billboards on roads and highways, as well as street signs, signs over shops and businesses, traffic and highway travel signs and house for sale signs. Ask your student what he thinks are the purposes of signs? (The main purpose of a sign is to inform someone of something—in other words, information!)

Let your student imagine for a moment what a street would look like that was full of shops but had no signs. Everyone would walk along and have to look into the windows to see what each shop offered. This is the exact scenario that Candace Fleming describes in *The Hatmaker's Sign* as Professor Wordsworth makes the final suggestion that the sign is perfect when it is blank. Talk with your student about the idea. While Wordworth's suggestion makes a humorous story, there are reasons why signs are used over shops and places of business. Shopkeepers want people to know who they are and what they sell. Hopefully their signs are interesting enough to bring people into the shops to buy. Therefore, signs are usually large enough so that you can see from a distance (from your car, for instance) what is in the shop. Sometimes they hang outside the door of a business perpendicularly to the sidewalk, so that people walking up and down the sidewalk can see from a distance the names of the shops ahead. The point is that there is a reason to have signs—and that a blank sign is not necessarily the answer!

Some signs are rather boring, but many signs are works of art! When a company is advertising through the medium of signs they will often use great art, stunning colors and graphics along with interesting words to capture people's attention and to get their purpose across.

When John Thompson created his sign for hats in *The Hatmaker's Sign*, he included information and a picture. Does your student think he can improve on Thompson's sign with better art, colors, design or lettering? Let him try to make his own rendition of John Thompson's sign, as if your student was Thompson's **advertising agent**. If your student enjoys this exercise, let him create a sign (on paper, cardboard, or wood) for a product, service or event that he has either made up, or one that he, himself enjoys.

Art: Poetry

In *The Hatmaker's Sign* your student can see many ships in Boston's harbor. Each ship had many sailors on board to carry out all the duties required to sail a ship. These sailors were sometimes at sea for a year or more. Here is the second stanza of a poem by John Masefield that describes how some sailors felt about the sea:

from "Sea Fever" by John Masefield

I must go down to the seas again, for the
  Call of the running tide
Is a wild call and a clear call that
  May not be denied.
And all I ask is a windy day with
  The white clouds flying,
And the flung spray and the blown spume,
  And the sea gulls flying.

The poem has more stanzas and is worth searching out (try the Internet or a good poetry anthology). Print it out if you can and let your student illustrate it with his own drawings or pictures from a magazine and put it in his notebook. Doesn't this poem it have a wonderful, rollicking rhythm of the ocean's waves?

Math: Economics - Ready Money, Credit, and IOU's

Talk with your student about what happens when John shows his sign to his wife, Hannah. Hannah says, "*Why bother with the words 'for ready money'?*" Does your student have any idea what the term *ready money* might mean?

First explain the definitions for Credit and for IOU. Credit is when a person buys something with a credit card (or by contract) and promises to pay for it later. In order to receive the privilege of paying at a later time, an extra fee called "interest" is added to the bill.

An IOU is a term used between friends or acquaintances. It means literally "I owe you" and can be a verbal or written agreement to pay back a debt owed at some future date.

Now with those definitions in mind, can your student figure out what the term "ready money" means? Ready money means "cash" paid upon receipt of a product or service.

Some people pay for goods and services with a check. A check is like ready money in that it pays for an item at the time of sale and can be redeemed by the payee for cash from the bank. When a check is used in payment, no bill comes at a later date. Not everyone will accept checks however, whereas cash money is accepted everywhere.

Another method of payment that is becoming more popular and is somewhat like "ready money" or cash is the debit card. A debit card looks like a credit card but as the transaction goes through, the money is taken from a bank account. The transaction is complete and no bill comes later.

Math: Subtraction

How long ago was the Declaration of Independence signed? Subtract 1776 from the current year. How many centuries ago was this? (A century is 100 years so it was signed over 225 years ago. Also, 1776 would be considered to have been in the eighteenth century.)

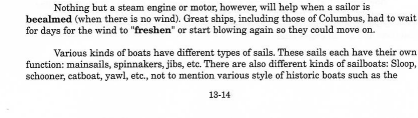
Science: Sailing

Turn with your student to the page where John is looking at his sign with the apprentices on the wharf. Point out the sailboat in the background. Sailing is an ancient form of transportation and prior to the age of fuel-powered boats and planes, it was the way people traveled over the water.

The first primitive sails were flat and stationary and would simply fill with air and the boat would move or if the wind ceased or substantially changed direction the boat would stop. Later, sails were made to billow out something like the wing of a bird or airplane (with more of an airfoil action for both lift and push) and it was also possible to bring them around to catch the wind.

It is wonderful, if one is sailing toward a destination and the wind is behind. This kind of sailing is called *"running before the wind."* However, the wind certainly isn't cooperative in all instances for all destinations and directions so there are techniques that sailors learn to move toward a destination even if the wind isn't blowing from behind the boat.

Using a technique called **tacking** a boat can move forward when the wind is blowing precisely against the boat's intended direction. In tacking, a sailor moves *generally* toward the intended direction but points the boat slightly to the left of the objective for a while, then slightly to the right of the objective so that the *average* course is the one intended but the boat never sails *directly* into the oncoming wind. Then there is also **trimming the sail**, which is when a sailor moves the sail to get the full benefit of the wind.



Nothing but a steam engine or motor, however, will help when a sailor is **becalmed** (when there is no wind). Great ships, including those of Columbus, had to wait for days for the wind to "**freshen**" or start blowing again so they could move on.

Various kinds of boats have different types of sails. These sails each have their own function: mainsails, spinnakers, jibs, etc. There are also different kinds of sailboats: Sloop, schooner, catboat, yawl, etc., not to mention various style of historic boats such as the

ships of the Phoenicians, Vikings, Spanish Galleons, Dutch sailing ships, etc. Any of these topics would make a good notebook page with clip art of the various kinds of ships, boats, and sails labeled. Good simple books on sailing are available at the library as well.

There are many kits for boats at hobby shops (even of Revolutionary era ships) that your student might enjoy looking at. If he seems ready for model building find a simple model kit and let him try his hand at this enjoyable hobby.

Now turn to the title page that shows a double-page illustration. Let your student look at all the boats in the harbor that move by sail. There is also a boat on the front cover. During the times of the writing of the Declaration of Independence and the American Revolution, sailing was the mode of transportation across the water!

Science: Ocean Fishing

Remind your student if you have studied the *Five in a Row* lessons for *Higgins Bend Song and Dance* or *The Raft* (both in Volume 4) you have covered the subject of fresh water fishing in some detail. Ocean fishing is somewhat different and you have an opportunity to discuss this topic from the story *The Hatmaker's Sign*.

Ask your student the basic difference between fresh water and ocean water. (Ocean water is salty.) It is because of this basic difference that plants and animals found in salt water are different species than those found in fresh water. Just like the fishermen of fresh water, a person who wants to find fish in bodies of salt water must know what kinds of fish are there, where they live, what they will take for bait, etc.

There are two basic forms of salt-water fishing. One is sport fishing and the other is commercial fishing. Sport fishermen use their own boats or fish from charter boats (which they hire, along with an experience guide, to take them out where the fish are being caught.) These sport fishermen use rods and reels for fish such as tarpon, marlin, swordfish, etc. The commercial fishermen fish from boats with nets or with long lines of baited hooks reeled up by the boat's winch. These fishermen fish for tuna, cod, herring, mackerel and other **marine** fish (fish that live in salt water). There are also commercial fishermen who fish with *traps and nets* for shellfish—lobster, crab, shrimp, etc.

(**Teacher's Note:** There are also **freshwater** game, and commercial fishermen, but because of the location of this story, we are focusing on the marine fishing.)

Science Exercise and Exhaustion

Remind your student that after John has run all over town hearing various people's opinions of his sign, Candace Fleming writes that he arrives at the sign painter's shop **exhausted**. What is exhaustion? Has your student ever felt exhausted? Share a time when you were exhausted.

The human body is a miraculous entity. It has the capacity to take in food, water and oxygen and covert the nutrients from them into heat and energy, the basic fuel that runs our body's activity. Sometimes however after hard work or serious amounts of exercise we find that our energy is depleted—that we have taken in fewer calories than we have spent, that we cannot get enough oxygen to meet our needs in comfort, or that we are dehydrated. In any of these cases we may feel a sense of tiredness, an inability to keep moving. We are physically exhausted.

In our story, John has run all over town, has been frightened by the rude magistrate, has suffered several blows to his writing ego. He is truly tired—completely exhausted!

Maintaining a proper diet with good nutritious foods, drinking plenty of water, and getting enough rest are all helpful in recovering from times of exhaustion.

Science: Clouds

Robert Andrew Parker, the illustrator of *The Hatmaker's Sign*, has painted beautiful clouds in the skies surrounding Boston's harbor. With your student look at the different clouds (sunset on the title page and others on inside pages) and enjoy the way the artist has painted the skies. Can you tell what kinds of clouds some of them are?

Find out from your student everything he can remember about clouds. Can he tell you the basic water cycle? **Clouds** form when water (**evaporating** from lakes, rivers and moist land) rises. As it rises it is cooled is **condensed** and falls again as some form of **precipitation**. Precipitation can be in the form of rain, snow, hail or sleet.

Help your student design a review chart with illustrations (his own drawings, or Internet pictures or art clips). If you have previously covered types of clouds you might want to take this opportunity to quickly review the names and resulting weather conditions: Clouds hanging low in flat layers are stratus clouds, often associated with rainy weather. Cumulus clouds are white billowy masses that often appear on sunny days in the mid-altitude range and are associated with fair weather. Cirrus clouds are delicate, wispy, upper altitude layer clouds made of ice crystals and signal cold air at high altitude. Nimbus clouds are gray and dark often bringing rain. The combination of cumulus and nimbus clouds called cumulonimbus, tower in columns and these clouds are the harbinger of more violent thunderstorms.)

Leave a check-box at the edge of each type of cloud entry and have your student watch for these clouds, marking off the ones that he sees. In time he will perhaps be able to mark off all of them.

Why do clouds float in the air? The wind has a part in blowing the clouds along, but clouds float in the air because their water vapor molecules are further apart than the surrounding air molecules. Because the molecules that make the clouds are less dense (further apart), the dense air beneath holds them up (and sometimes even pushes them up) and thus clouds float along (or rise) through the air. (Shown very simply in the illus-

tration below.) The principle of something less dense being held up by something more dense is called buoyancy. The principle is the same with objects in the water or in the air.

(**Teacher's Note:** Clouds are studied at almost every age. Find out what your student already knows about clouds, review some basics and then let him choose an area or topic about clouds to research. Let him make a few new pages for his science notebook. If your student knows his basic cloud facts, he might enjoy **investigating topics** such as: how the clouds affect the heating up and cooling off of the earth, storm fronts, and types of storms on land and sea, etc.)

(**Teacher's Note: Supplemental Book** to go with *The Hatmaker's Sign*: If you have not yet purchased a copy of *America: A Patriotic Primer* by Lynne Cheney (wife of Vice-President Richard Cheney) this would be a good time to do so. As you study the beginnings of the formation of the United States of America, it would be a good time to celebrate and remember all the precious rights and freedoms we have in our country. *America: A Patriotic Primer* is a joyful celebration of the most important foundation principles of America. It is what your student needs to know and hold dear, presented in a format that will allow him to learn and appreciate what has gone before and what we now enjoy.)

Bible Lessons

Remind your student that Thomas Jefferson wrote words that *sang*. He felt his words were the best words for the project at hand. Then make the connection that there is a very special book of words. Does your student know what that is? It's the Bible, God's words to His people. Each of the following verses also has to do with "**words**."

Psalm 119:11 Thy Word I have treasured in my heart so I will not sin against Thee and 119:105 that Thy Word is a lamp for my feet and a light for my path. — ***Psalm 119:11 Psalm 119:105***

John 1:1 In the beginning was the Word, the Word was with God and the word was God — ***John 1:1***

John 6:68 Simon Peter tells Jesus that Jesus has the words of eternal life — ***John 6:68***

John 8:31 Jesus said that if people would abide in His Word that they would be his disciples — ***John 8:31***

Romans10:17 Faith comes by hearing, and hearing by the Word of God. — ***Romans10:17***

Galatians 5:14 The entire Law is fulfilled in one word in the statement to Love your neighbor as yourself. — ***Galatians 5:14***

2 Timothy 2:15 is an admonishment to be careful to study the word so that you can handle it accurately. — ***2 Timothy 2:15***

Hebrews 4:12 the Word of God is living and active and sharper than any two-edged sword — ***Hebrews 4:12***

James 1:22 we should be doers of the Word and not merely hearers. — ***James 1:22***

1 Peter 2:2 like new babies we should long for the milk of the Word. — ***1 Peter 2:2***

1 John 1:1 John's testimony about being with the one (Jesus) who was the Word of Life. — ***1 John 1:1***

Compassion and sympathy are demonstrated by Benjamin Franklin, when, like a good friend, he tries to comfort Jefferson. In 2nd Corinthians 1:3-4 it says that God is the God of all comfort, who comforts us so that we can comfort others with the same comfort that we have received. — ***2nd Cor. 1:3-4***

After running all over town, John was exhausted. This reminds us of what Jesus said in Matthew 11:28-30—that He wanted all to come to Him that were weary and He would give them rest. — ***Matthew 11:28-30***

Romans 12:3
Micah 6:8
1 Corinthians 8:1

Jefferson was struggling with some pride issues. He thought his words were best and was most upset that anyone would want to change them. This feeling, apparently (from information in the Author's Note at the back of the *The Hatmaker's Sign*, never left him and he was bothered by it for the rest of his life. Perhaps some of these verses might have helped him: Romans 12:3, Micah 6:8 about being humble, and the last sentence of 1 Corinthians 8:1 about how knowledge puffs us up while love edifies.

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1 Samuel 17
Daniel 6
Daniel 3

As John hurries all over town, he meets the magistrate who speaks in an intimidating manner, "Hand it over or face the stockades!" David, in the story of David and Goliath in 1 Samuel 17, Daniel in Daniel 6, and Shadrach, Meshach and Abednego in Daniel 3, all faced intimidating circumstances and stood up for what they believed. There are some circumstances that call for this kind of courage.

Romans 13:1-10

But many intimidating circumstances are less critical and the believer, armed with the knowledge of who he is in God, can let these situations go with a soft answer. The magistrate is not asking John to compromise his faith, though the magistrate is cruel in the way he asks for what he wants. Thus, John carries out the verses of Romans 13:1-10 as he graciously submits to the governing authority even though the man is intimidating.

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Micah 6:8
Galatians 5: 22

Some of the clues we receive to John's polite and respectful character are that he listens to his wife, tips his hat to the Reverend, kisses the gloved hand of the Lady (as the respectful behavior of the day), lawfully hands over to magistrate the paper and bows to him and generously gives the boy apprentices some money. Micah 6:8 tells us what God would like us to do, while Galatians 5: 22 reminds us of the fruit of the Spirit which we grow as we abide closely with the Lord.

COLONIAL DINING FROM THE DAYS OF THE REVOLUTION

The English influence is obvious in the Roast Beef with Yorkshire Pudding entree, the creamed vegetables and the Coventry Cake which is an English recipe over 800 years old! Both Yorkshire and Coventry are English towns. These recipes would have been served for a special gathering, possibly after writing an important document. Find a special occasion and take the time to try these delectable dishes as you remember the men who gave so much to the cause of our country.

Roast Beef and Yorkshire Pudding

1 (8 - 10 lb.) rib roast (bone in)
seasoned salt
freshly ground pepper

Insert a meat thermometer into thickest part of meat. Place fat side up in roasting pan and place in a preheated 450 F oven for 15 - 20 minutes. Reduce heat to 325 F and continue cooking until meat thermometer registers desired doneness (see note below). Season half way through cooking time. Remove and let stand for 15 minutes (cover with foil) before carving.

Roasting Note:
Well Done: 20 minutes per pound, or 160 F – 170 F on meat thermometer.
Medium: 15 minutes per pound, or 150 F – 160 F on meat thermometer.
Rare: 12 minutes per pound, or 130 F – 140 F on meat thermometer.

Yorkshire Pudding

1 cup flour
1/2 tsp. salt
2 eggs, beaten
1 cup milk
2 tbsp. fat drippings from roast

Combine flour and salt. Beat eggs until thick and then add the milk. Make a well in the center of the flour mixture and pour in egg mixture. Beat at low speed until smooth. Chill. (May be prepared ahead of time while roast is cooking.) Spoon some hot fat drippings into individual muffin pans. Place the muffin tin in the oven (still at 450 F from the roast) until the fat in each muffin pan sizzles. Remove the pan, and carefully pour the chilled pudding batter into each muffin pan until each is 2/3 full. 450 F for 15 - 20 minutes or until puffed and golden brown. Reduce heat to 350°F and cook about 15 minutes more. Serve immediately with roast beef.

Creamed New Potatoes and Peas

2 pounds small new potatoes
2 cups milk
2 cups shelled fresh peas
1/4 cup (1/2 stick) butter
1/4 cup all-purpose flour
1/2 teaspoon salt
1/2 cup finely chopped onion
1/2 teaspoon. grated nutmeg
1/2 cup grated parmesan cheese
1/4 teaspoon. pepper

Peel the potatoes and place in a medium saucepan, adding enough water to almost cover them. Cover pan and cook over medium heat about 20 minutes or until potatoes are tender when pierced with a knife. Be careful not to overcook the potatoes. Drain well and keep warm.

In another saucepan, steam fresh peas over hot water about 5 to 6 minutes or until barely done. Meanwhile, in a medium saucepan over medium heat, melt butter. Saute chopped onion until golden. Add flour and cook, stirring until mixture bubbles up well. Do not allow roux to brown. Add the milk and cook and whisk until smooth. Blend in salt, nutmeg and pepper. Add the peas and parmesan cheese to the white sauce, turn heat to low, and cook for 5 minutes. Place the potatoes in a 6-cup casserole and pour creamed peas over them.

Coventry Cake

(This cake needs to be baked about two hours before serving.)

1/4 cup shortening
2 cups light brown sugar, **divided**
1 large eggs, separated
2 1/3 cup flour
1 1/4 cup buttermilk
1 teaspoon baking soda
1 teaspoon baking powder
1 teaspoon ground cinnamon
1 teaspoon vanilla
1/2 teaspoon ground nutmeg
1/4 teaspoon cloves
15 pecan halves

With your mixer set on medium speed, cream together the shortening,1 cup brown sugar and the egg yolks. Next, reduce speed to low and beat in flour, buttermilk, baking soda, baking powder and spices. Pour into a greased and floured 9x13 pan. Continued:

Before putting the cake into the oven, prepare the topping. In a small bowl, whip the remaining egg whites to soft peaks and gradually add 1 cup of brown sugar until sugar dissolves. Spread this meringue over the unbaked cake batter, covering the top completely. Arrange the pecan halves into 3 rows of 5 pecans each.

Place the cake in the oven and bake for 40-45 minutes, or until a toothpick inserted in the center comes out clean. Cut into squares between the pecan halves.

Teacher's Note: *You enjoy eating your Revolutionary times dinner with some of Mozart's music playing in the background. This famous composer who lived from 1756 to 1791 was writing his music in Austria during, and after, the years spanned by the American Revolution.*

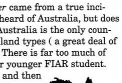
Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Title:	Pumpkin Runner
Author:	Marsha Diane Arnold
Illustrator:	Brad Sneed
Copyright:	1998
Summary:	Set in Australia, Joshua, a man who loves to eat pumpkins, runs a race that has everyone noticing.

Social Studies: Geography – Australia

Marsha Diane Arnold's idea for the *The Pumpkin Runner* came from a true incident which happened in Australia. Your student has probably heard of Australia, but does he know that it is a **continent** as well as a country? In fact, Australia is the only country that is also a continent. This country is vast in its scope of land types (a great deal of Australia is desert), unusual animals, peoples, history, art, etc. There is far too much of this interesting country to tackle all at once, especially for your younger FIAR student. Find a few interesting facts about Australia to share with him and then have one or two picture books from the library on hand that your student may dip into at his leisure. That way he can be running to you with exciting bits of information to share. Remember that there are many years in which you can build on the beginning information about this country. Begin a folder for Australia and continue to add to it throughout your student's school career. Now, find Australia on your world map and place your pumpkin story disk somewhere between its cities of Melbourne and Sydney.



(**Teacher's Note:** For an older upper grade school level student, who would like to join in, you might have him draw a map of Australia including its main states and territories, as well as principal cities and the nation's capital: Canberra. Note, too, such interesting points as the Great Barrier Reef, the central deserts area, Ayers Rock, etc.)

Social Studies: Geography – Hemispheres

Studying Australia from the story *The Pumpkin Runner* gives you an opportunity to begin or build on your student's knowledge of terms like **hemisphere** and the season-

al changes which exist in the **Southern Hemisphere**. One way to begin a lesson on hemispheres is to mention that the prefix "hemi" means "half" and the root word "sphere" means "round object".* Then take two apples, each of which can represent earth (and each of which are spheres) and cut one in half from the top stem down through to the bottom. Talk about the apple being cut "in half" or in two. You will have two hemi (or half) spheres. Then cut the other apple in half through the middle (the equator-like place). You will still have two pieces of apple. They will still be in two halves but they have not been cut the same way. (*Maybe your student would recognize "hemi" engines.)

Now, make the analogy to a globe of the earth and show how cartographers (map-makers) have created an imaginary line to divide the earth in half east from west (called the **Prime Meridian**) and another line that divides earth in half north from south (called the **Equator**). Ask your student why he thinks that people would want to make such dividing lines. You could mention that just as we name streets so that we know where to go, lines like the Prime Meridian, the Equator and others help us pinpoint where we are on this large earth. The lines are helpful in giving directions and explaining where different areas are.

For your young student just mentioning Prime Meridian and Equator will be enough. For your oldest student you may want to include information on the additional lines called the **Tropic of Cancer**, **Tropic of Capricorn** and continue with the concepts of the lines of **latitude** and **longitude**.

Students living in the **Northern Hemisphere** will be interested to know that the seasons there are opposite from the seasons experienced in the Southern Hemisphere. For older students, find a good book at the library that explains this phenomenon. However, for young students they will just like to know that when it is summer where they live in the Northern Hemisphere (perhaps the United States or Canada) it will be winter in the Southern Hemisphere (like in Australia where the pumpkin runner lived).

Even for your oldest students remember that there are years to build upon these topics. Keep your subject information as interesting and relevant as possible, for instance by reminding them that you are studying the subject of continents or hemispheres because Australia is where the pumpkin runner lived. You could ask your student, "If in this story the Koala-K Race was run in May, what kind of seasonable weather might they be having?" Then talk about the seasonal differences "down under". ("Down under" is a sort of nickname for Australia since it lies completely beneath, or south of, the equator.)

Social Studies: Geography - From Paris to Hong Kong

In our story it says that the news wire told the world about Joshua and the race, "from Paris to Hong Kong." Can your student find these famous cities on a world map? If not help him discover the location of these places and how far apart they are. Where are they in relation to Melbourne and Sydney, Australia? If you can, find a globe and go from Paris around to the west till you reach Hong Kong and see how much of the world that would encompass. Do you think that the phrase, "From Paris to Hong Kong…" really meant all over the world? (If you began at Paris and went west around the world to Hong Kong, it would be just about around the world.)

Social Studies: Australian Sheep Ranches

Just like Joshua's, there are many sheep ranches (or stations) in Australia. *The World Book Encyclopedia* has a map showing the areas of sheep ranching on the Australian continent. Australia produces much wool and sheep are exported, as well as used locally as a meat supply in the form of lamb and mutton.

If you have studied the *Five in a Row* story lessons for *Warm as Wool* Volume 3, you may have already covered a lot of information on sheep. Briefly review the information with your student and remind him that *Warm as Wool* took place in the United States. In studying *The Pumpkin Runner*, he sees that here is another country that raises sheep—Australia. However, Australia does it on a much larger scale.

Social Studies: Corresponding with People from Australia

The *Five in a Row* website Message Boards have often had people posting messages from Australia. On the *Five in a Row* Message Board try posting and asking your questions about life in Australia. Only adults can post, but you will enjoy the exchange of information. Maybe you can ask about or research yourself, the river Yarra mentioned in the story.

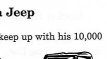
Social Studies: Sports - Running, and Rowing

In the story *The Pumpkin Runner* you can read about three different sports. Most of the story centers on the sport of running a race. There are many different kinds of races in which runners participate. Some are lengthy such as a marathon, or the 900K race that Joshua ran. Others are short, called sprints, and there are lengths of races in-between. Races are timed and records are set. Runners train, and generally wear certain attire to help run less encumbered and help them cut their time.

In places where there are long stretches of river often there are groups of people who enjoy being part of a rowing crew. Your student may know what a simple rowboat is, but is he familiar with team rowing? In the United States there are many rowing clubs and races, some are affiliated with colleges, in the eastern states. Team rowing is also an Olympic event for both men and women.

Social Studies: The History of a Jeep

In *The Pumpkin Runner*, Joshua does not use a Jeep to keep up with his 10,000 acre ranch, however he does borrow one to get to the race. Does your student know what a Jeep is? Can he point to one in traffic? If you have a student who is interested here is some information on the history of the Jeep: The first Jeep came off the assembly line in 1941, built to government specifications and used extensively in World War II.



For students who sometimes think history is a lot of dry facts, finding out how a common vehicle like the Jeep had its origins in World War II can

be very exciting! An older student may want to explore further exactly how these vehicles were used in the wartime effort.

After WWII was over, the first civilian Jeep was produced in 1945 and it was marketed to farmers and construction workers as a "workhorse" vehicle. Eventually customers, who wanted an open air, rugged vehicle with off-road capabilities sought the Jeep for their vehicle. Today many people enjoy owning a Jeep. Jeeps are now used for an infinite variety of work and play activities as well some military applications.

Social Studies: Character Relationships – Disagreeable People, Cheating, Reactions

Dodgerelle must have been afraid that it was possible for Joshua to win the race. What did Damien do? (He paid a balloonist to carry him over part of the racecourse so he could win.) Damien's bragging was one thing, but to deliberately try to fix the race in his favor is what we call cheating. Cheating means to take unfair steps to win and it isn't limited to running a race but is pertinent to all sports, games and competitions, business dealings and other areas of life. Discuss with your student that to become people of integrity, honest, good citizens, we must make a firm decision that whether we win or lose at something we will try our best and not give in to the temptation to cheat.

Probably your student will be able to understand and talk about the subject of cheating. See how many aspects of this topic you can discuss together, i.e., the effects it has on the perpetrator, the victims; the ideas of integrity and honor; the practice or work needed to be first or best; losing gracefully without resorting to cheating, etc.

Then, or perhaps later, you might discuss how Damien's stunt affected Joshua (no pumpkin for him at the last checkpoint) and how Joshua faces that situation. Many times people are disappointed in their plans—some get angry and quit and some are flexible, being willing to do things a different way than they had planned. In *The Pumpkin Runner*, Joshua doesn't despair! He decides to keep running without his pumpkin energy food, and just do the best he can.

Social Studies: Character Relationships - Motivation for Participation in Sports

Ask your student why he thinks that Damien Dodgerelle wants to run in this race. Does your student think Joshua Summerhayes wants to run for the same reasons? (Your student may have said that Dodgerelle seems more interested in the money and Joshua in just running for pleasure.) People enter sports for many different reasons. Some want to stay physically fit, while others want fame or prizes. But, there are some people who become involved in sports because they just feel good when they participate! In this case, Joshua loves to run. He even shuns driving on his ranch because he prefers to run from place to place—it just gives him pleasure. It will be interesting for your student as he watches, Little League, college and professional sports in his life to discern what motivates the athletes and how their characters are shaped by their motivations.

Social Studies: Character Relationships-Disagreeable People, Bragging

The Pumpkin Runner gives wonderful opportunity to discuss the subject of bragging. After reading this story for a few days, ask your student about the verbal exchange between Damien and Joshua at the beginning of the story.

When Joshua wants to be friendly and introduces himself to the rest of the runners, Damien begins to tell Joshua how much he has practiced. Damien does this in a way that we call bragging. Bragging is being overly proud of what you've done and telling people (who don't ask) about it in such a way as to make the other people feel less adequate. Damien continues his bragging with information on how many weights he's lifted while performing a difficult exercise in front of Joshua.

How does Joshua react to such bragging? Joshua reacts with what is known as humility. He doesn't try to make himself look great by telling all he's done. He quietly says he's just checked his herds. (He humbly leaves out the information that his sheep ranch is ten thousand acres!) When Damien tells how many weights he's lifted, Joshua humbly says he carried in a few sheep. Even the clothes he wears show no excessive pride or desire to make himself look like a great racer.

Can you think of any personal anecdotes to share with your student about times when someone has bragged incessantly in front of you? How did it make you feel? How did you react? What did you think of them? Does your student have any incidents to share?

It is good to remember Joshua's reaction to the bragging—he rather ignores it and even when Yellow Dog growls, Joshua says, "Never mind."

(**Teacher's Note:** If you have taught through the lessons of *Five in a Row* in Volumes 1, 2 and 3, you may have noticed that there have been many lessons on disagreeable people. Remember Mr. Sneep in *Lentil*? Or Henry B. Swap in *Mike Mulligan*? And, there are many others. It is interesting that in the scope of these stories the main characters usually don't react in emotional ways or with irritation, but rather quietly ignore these difficult characteristics in others while trying to do what is right themselves. *The Pumpkin Runner* continues to demonstrate for your student that he doesn't have to be blown off course by every disagreeable person who comes his way!)

Language Arts: How Do You Spell Australia?

One additional point you might make with your reading and writing students is to look at the spelling of the word Australia. Many North Americans say this word as if the word "trail" appeared at the end of it. However, pronounced correctly one would hear, in the name of this country, the man's name Al. Therefore, Australia is pronounced "Al"-ya, not "trail"-ya. When one pronounces the name correctly it is much easier to remember how to spell it!

Language Arts and Drama: Latest News On the Wire!

When the news of the big race came out, the story says it was the "latest news on the wire." Does your student know what that means? Wire services are news gathering services (like Associated Press and United Press International) that collect stories which have general national or international interest. These wire services send the news stories to subscribing newspapers and television and radio stations so that they can print or broadcast them. This service allows the local newspapers, television news and radio stations to work on local stories but still have good access to stories of greater importance nationally. Your student can look at a newspaper and often see at the beginning of the article an **AP** or **UPI** designation which shows that these stories came from the **Associated Press** or **United Press International** news wire services.

Have your student pretend to be a reporter. Use a microphone and recorder to tape his own version of news story of Joshua's big race. If your student is more comfortable you can be a co-anchor with him and talk back and forth about the race as announcers do.

If your student has another news incident, real or imaginary that he would like to report, let him write the story, and announce that one as well!

Language Arts: Vocabulary (words defined as they are used in the story)

annual	occurring once a year
anticipation	eagerly awaiting something
attire	the clothes that you wear (running attire consisted of shirt, shorts and shoes)
bearings	figuring out where you are, finding your location
camera-shy	not wanting to have your picture taken
clapboard	thin boards used to cover the outside walls of a house
ewe	adult female sheep
flex	to make a muscle tight by contracting it
formulated	to express in precise terms (in this case by a precise formula or recipe)
kilometers	metric unit of length which equals 1000 meters
lanky	exceptionally tall and thin

mate	Australian term for friend or acquaintance (pronounced more like mite)
precisely	exactly
push-up	an exercise done to strengthen upper body muscles
registration	to sign up, as for a competition, etc.
shoo-in	term used in competitions meaning "should win easily"
spectators	those who come to watch an event
swerved	turned sharply away from an object
winks	a slang term for sleep: "I need a few more winks."

Language Arts: Tall Tale

The Pumpkin Runner falls into the genera of tall tale as well as an adventure story. There is an excellent description and lesson about tall tales found in the lesson titled Language Arts: Tall Tales in *The Gullywasher* found in FIAR Volume 4.

Reading the last pages of *The Pumpkin Runner* you will find that this tale stems from a true incident! Marsha Diane Arnold used this information and built a fanciful tale around the main character. Find the parts of the story that are actually true and then list all the extra incidents that have been built around these actual facts! There are some outlandish, exaggerated incidents that certainly help brand this story is a tall tale. With your student think about the newspaper that blew smack into Joshua's face and just happened to have the race news on it or the idea that a ten-year old could run 24 miles in a day. There is also the pumpkin filling jeep, as well as the balloon crash!

Remind your student that he can find an interesting article or hear an interesting story on the news and build a story around what he's found, just like Marsha Diane Arnold!

Language Arts: Fable

The Pumpkin Runner is also reminiscent of a famous **fable** called "*The Tortoise and the Hare.*" Fables are short stories that teach some kind of moral. Often these stories have animals as the characters. As your student becomes acquainted with some of the more famous fables, he will notice how writers borrow basic plot lines from these old stories and make new stories from them. Marsha Diane Arnold had only a few facts to begin her story but the way she stages the race reminds us of the old story of the tortoise and hare.

After a few days of reading *The Pumpkin Runner*, read the fable of the tortoise race and see if your student picks up on the similar plot line. If not, open up a discussion

about it. You could begin by saying, "It seems to me that this fable and *The Pumpkin Runner* story are a bit alike. Can you see any similarity?" Then go on to explain if necessary. One of the story actions that can remind us of the old fable is the beginning of the race. At the gun, the other eight runners sprinted by. How did Joshua take off? The story says he shuffled by. And even when Damien tried to cheat, the slow steady pace of Joshua won the race. Indeed that is the moral of *The Tortoise and the Hare*: Slow and steady wins the race. Many people begin a project or competition with great enthusiasm but only proceed in spurts. It is often the slow steady plodders that reach the finish line or finish their projects in good time. (In all fairness to some personality types be sure to recognize that some people can start a project in a flurry and still finish first! Many others though, having begun with great enthusiasm might have been better off to start more slowly and be diligent to finish.) How would your student describe himself when it comes to projects that take a lot of effort?

Learning to make connections between themes and plot lines of books, poems, essays, etc., is a vital skill for work in the upper grades and college. In an enjoyable way, with these kinds of lessons, you can gently begin to train your student to "see" such connections.

Language Arts: Comprehending the Concepts and Illustrations

Here are a few questions that you might talk over with your student. Near the beginning of the story, why did the race official Mr. Manning think Joshua probably wasn't in the right place? Why didn't Joshua tell Damien that his herds covered a 10,000 acre ranch? Why did reporters push Joshua aside to interview Damien? Does your student actually think Yellow Dog looks camera shy, as Joshua tells the photographers, "Not too many pictures…"? It seems as if Yellow Dog is enjoying the notoriety immensely.

Language Arts: Using True Incidents to Create a Good Story

Through the time you have used your *Five in a Row* Curriculum you have studied stories which were birthed from true incidents. Can your student remember some of them? Volume 1, *The Glorious Flight* by Provensen; Volume 2, *The Giraffe That Walked to Paris* by Milton; Volume 3 *Paul Revere's Ride* by Longfellow, and *Warm as Wool* by Sanders.

The story of *The Pumpkin Runner* is based on true incidents of a man named Cliff Young. Read the author's note at the bottom of the last page for the details. Again, remind your student to watch for interesting articles or news stories that would inspire a good children's story!

Language Arts: Story Ending

The delightful ending of *The Pumpkin Runner* leaves us believing that Joshua and his dog are still running somewhere in Australia! As the story text says, "But Joshua Summerhayes still likes to run…with Yellow Dog trailing behind him." This is an "off into the sunset"* type of ending that makes the story seem even more real and continuing! It makes the reader feel it is possible that someday he, himself, might actually run

into Joshua Summerhayes! Remind your student that when he writes a story he also can use this type of ending to create that sense of timeless continuation for his own story.

*Notice how the illustration shows Joshua running off "into the sunset" an example of the illustrator faithfully portraying the subtle meanings of the story.

Language Arts: Literary Device - Alliteration

Marsha Diane Arnold chose many character names for her story *The Pumpkin Runner*. Make a list of these names with your student. (Joshua Summerhayes, Yellow Dog, Aunt Millie, Damien Dodgerelle, Rancher Waudley, Mr. Manning, Katerina Volta) Does one name sort of stand out—sounding (to your ears) more interesting? Is there one name, which is rather fun to say over and over? You may have picked the name that has the same letter beginning the first and last name: Damien Dodgerelle. Using the same letter to begin a series of words is called alliteration. It makes the words sound more interesting, such as, Susie's galoshes make splishes and sploshes. Authors make use of this literary device called alliteration to make their work sound melodic and interesting. Technically, the character Mr. Manning would also be alliterative. The author could have chosen a last name not beginning with the letter "m." There are also some place names in this story that have the same alliterative quality. See if you can find them. (Cockatoo Canyon, Platypus Pond)

Remind your student that in his writing he can make use of this device, too. Notice, though, that Arnold did not use this device for every character. Too much alliteration is wearing on the listener's ears and lessens the impact of the word sounds.

Language Arts: Common Sayings and Their Meanings

As you have read through *The Pumpkin Runner* with your student have you noticed such sayings as "he's a shoo-in" (which means it seems as if he'll be the easy winner), or "looking down his nose"(which means feeling superior)? Talk about what these phrases mean and look for similar sayings and phrases in other stories that you read together. If your student enjoys list making, he could even begin a list of common sayings he finds in the stories he reads. He can keep this list in the Language Arts section of his notebook.

Art: Identifying Places Through Famous Architecture

If you taught through the lessons in *Five in a Row* Volumes 1, 2, and 3 you will remember that your student learned to identify such famous landmarks as the Eiffel Tower (*Madeline*), the skyline of Moscow (*Another Celebrated Dancing Bear*), the canals of Venice and the Rialto Bridge (*Papa Piccolo*), the pyramids (*Giraffe That Walked to Paris*), Jefferson's home in Monticello, Virginia (*Paul Revere's Ride*), and Islamic style architecture (*Miss Rumphius*).

The Pumpkin Runner offers the opportunity for your student to become familiar with another famous landmark. In the illustration opposite the last page of the story is a picture of Joshua running his final steps of the race. In the background you can see a

city—the city where the race ended, Sydney, Australia. Sydney is on the coast in a bay area and you can see not only the Sydney Harbor Bridge but also the famous **Sydney Opera House** in Sydney Harbor. It is the building that looks like it has two rather petal shaped towers that appear to be unfolding. Actually these structures represent the billowing sails of the boats of the harbor. The Sydney Opera house, completed in 1973, has become internationally famous for it's original and beautiful architecture.

Your student will enjoy knowing about the Sydney Opera house because nearly every advertisement and article or media show on Australia, and in movies, or in magazines all exhibit, at some point, this famous landmark.

If your older upper grade level student has a passion for architecture you can probably find a book at your library which tells about the designing and building and use of the Sydney Opera House.

Art: Variety

(**Teacher's Note:** Many of these art lessons are simply to enable your student to notice and enjoy more of the illustrator's wonderful artwork. The lesson's activities are just observing and discussing what the artist has done. Perhaps someday your student will remember some of this artist's choices and use them as he draws or paints his own works of art.)

Discuss with your student the fact that Brad Sneed could have painted all the illustrations for *The Pumpkin Runner* in the same daylight as the cover picture. Did your student notice that instead Mr. Sneed alternates some daylight pictures with some that are very dark? Page quickly through the story and notice this artistic effect. The variety and contrast in these pictures helps hold the viewer's interest and creates an energy and excitement for the race as the pictures move from light to dark and back to light again.

Art: Tying Illustrations to the Story

Brad Sneed, using oil paint on canvas, prepared these engaging pictures in *The Pumpkin Runner*. This illustrator is known for his paintings that have exaggerated proportions. So, it is most fitting for this tall tale to also have illustrations of exaggerated proportions! Enjoy looking over the illustrations again thinking about how well they express the story's *tall* tale and *stretched* truths!

As a story *The Pumpkin Runner* has a great deal of humor and the illustrator has marvelously captured this humor in his paintings along with wonderful scenes full of action. With your student, glance through the illustrations pointing out to each other the pictures you each find humorous. (Don't miss Aunt Millie sleeping on top of the pumpkins!) Look, too, for those illustrations that display action!

Also, have you noticed how many pages of the story have illustrations that are painted with orange—like a pumpkin? Here is another way an illustrator can, thematically, tie his artwork to the story line.

Art: Viewpoint

Look at the picture next to the text where Katerina talks about her secret power punch. It is as if we are looking into the picture from further away than the dog yet at Yellow Dog's own eye level! This is what the world actually looks like to Yellow Dog—giant feet and low level views. (Just for fun, also notice Yellow Dog's expression as he looks at the purple power drink.)

Art: Elements of Perspective

[**Teacher's Note:** This is a long lesson. You may want to break it up into parts for different days or take only one element to discuss. If you have an older student, he might enjoy the entire lesson.]

Look with your student at the picture of the runners warming up and stretching while Joshua is eating a piece of pumpkin. Brad Sneed, the illustrator has used several different elements of perspective to create a sense of depth in this picture. (If your student does not understand the preceding statement try this exercise to heighten his awareness. Clear a book shelf or counter at your student's eye level. Place several objects on the shelf some in front, some in the middle and some at the back. It helps if the objects are all the same—small play-people figures, or miniature small cars, etc. Have your student notice where the feet of the figures (or the car's tires) appear on the shelf. It looks as if the middle figure's feet (or tires) are above the foremost figure's and that the back figure's feet (or tires) are even higher than those of the middle figures'. It is easy to see with such a model and figures that there is depth to the arrangement. Let your student put his hand up to the shelf and push it to the back of the shelf. Now explain that an artist begins with a flat piece of paper. Let your student put his hand back up to the shelf and then stop. How do you show that the people figures or cars go back in space when you have a flat piece of paper? In order to paint scenes that look three-dimensional, the artist uses certain elements of drawing called perspective. Several of these elements of perspective are clear in the pictures Brad Sneed painted for *The Pumpkin Runner*.

First, take a piece of tracing paper and place it on top of the illustration of the stretching runners and Joshua eating the pumpkin. Using a ruler, have your student draw a line across the paper at approximately the level of the spectator's feet (in the background of the picture). Also, notice how tall these spectator's are. (Make a small vertical mark to show their height as they stand on the street. Then draw another parallel line across the paper at the bottom of the feet of the nearest runner warming up. Notice that the runners are larger and taller than the spectators are, but smaller than Joshua. Make a vertical mark over the standing runner to show height. Now look at Joshua and Yellow Dog. Their feet are so low on the picture that they have disappeared! The bottom of the paper will be the base line or line where the foreground begins. Make a vertical line to represent Joshua's height. This is a simple exercise in observation, demonstrating that an artist can choose to show depth by varying the **size** of his figures as well as where the feet are **spaced** on the paper. In the placement of the foreground (or even

falling off the foreground) the size of figures are large and the feet are low. In the middle ground the size of the figures are medium and the feet are higher, and the background the size of the figures are quite small and the feet are higher still. Now go back and find the illustration where Yellow Dog is looking up at the runners and glaring at the purple power punch. See Joshua's feet and notice the same element of space used to show the mid-ground runners (their feet are higher up on the page) and background spectators who appear to be the deepest in the picture. If your student enjoys it, let him look for other examples of this element of perspective in Brad Sneed's illustrations.

Second, draw your student's attention to Joshua as he's enjoying his slice of pumpkin. Point out the bright color in Joshua's clothes. Now look at the runners that are stretching and warming up for the big race. Notice the colors of their clothes. (The clothes of the runners have some color but they are far less colorful than Joshua's and they appear slightly gray.) Last, look at the spectators behind the blockades. Their clothes are all grayed. This is another technique called intensity that an artist may employ to give the effect of depth in a painting. The element of **intensity** (or density) is in use when the background figures' colors are grayed (in other pictures it could be trees or buildings, etc.) and they have much less detail or appear blurry. (Your student may remember a similar lesson in *Five in a Row* Volume 1 when he studied Allen Say's paintings. If you still have or can obtain a copy of *Grandfather's Journey*, look with your student through the illustrations and see if you can find pictures that use this element of perspective.)

Then, mention to your student that Joshua is at the front of this picture. Your student can tell Joshua is in front because he is hiding parts of the runners behind him. In other words Joshua overlaps the runners that are behind him. Joshua and the stretching runners are both **overlapping** the tiny spectators in the background.

These are some of the ways that an artist can choose to create depth in his paintings and drawings. Your student can begin to notice that many artists use these techniques as he examines drawing and paintings he sees at galleries, and in books and magazines. Learning to see objects clearly is a large part of learning how to draw. From these studies your student will begin to see objects around him more clearly and will understand that he can use these same **elements of perspective** in his own drawings whenever he wants.

This artistic treatment of the runners and to an ever greater degree the spectators give the picture a depth—a feeling that the picture goes backward into the background.

Applied Math: Metric System

This story, based in Australia, provides a wonderful opportunity to introduce or reexamine the Metric System or to explore a new facet of it. The race in which Joshua wants to compete is 900 Kilometers. You may wish to explore millimeters, meters and kilometers at this time. There are wonderful simple books on introducing the metric system to your children at your library, as well as books which go into more depth for those older students who are ready for more detailed information.

In *The Pumpkin Runner*, author Diane Arnold also writes on page two that Joshua, "...ran forty kilometers, all the way to Cackatoo Canyon, just to check on a newborn

lamb." With your student, do the conversions to find out how many miles it would be to the canyon? The approximate conversion factor for kilometers to miles is 0.6. Multiply the kilometers, times 0.6 to know approximately how many miles it is. (40 kilometers is approximately 24 miles)

Applied Math: Unit Measure of Land – Acre

Joshua Summerhayes worked on a 10,000 acre ranch. How big would that be? With a bit of figuring it seems that the ranch could be about four miles square. You may be able to find an area that you could drive around in the car that was four miles by four miles just to give your student an idea of how big a ranch like that would be. If you have any vacant or farm acreage around you, you could point out for-sale signs that tell how many acres each land parcel includes.

Applied Math: Division

The text of our story says, "The crowd squeezed around as Mr. Manning presented Joshua the check for $10,000." Then it goes on to say that Joshua split the winnings with his fellow runners.

Your older student may or may not be ready for actual division, but for any student not ready and for the younger student you could proceed in this way. Problem: If there were eight runners, how much of the prize money did each runner receive? ($1250.00)

Set up eight objects to represent the runners (if you have toy people from various games and toy sets these would be great). Make ten pieces of paper and mark one thousand dollars on each of these. Have your child take these papers and distribute them one to each runner figure until there are not enough to give each an equal number. He will have two left over—not enough to go around. Ask him if he can think of how this problem might be solved. Have ready twenty pieces of paper, marked one hundred dollars each. Your student can turn in the leftover two thousand-dollar papers and receive the **equivalent** amount of twenty "one hundred dollar" pieces of paper. Let your student place these equally among the eight figures. He will end up with four left over. What does your student think will happen with this left over money? Have him trade in the four pieces of paper equaling four hundred dollars for eight pieces of paper each marked fifty dollars (to represent fifty-dollar bills). Explain that this is an equivalent amount. Now let your student distribute the money again and this time he should come out even. The ten thousand dollars has been divided equally between the eight runners. Help your student add up the amounts listed on the three pieces of paper at one of the figure's place. Adding one thousand, then two hundred and another fifty he should get the answer $1250.00 that each runner received.

Now on a chalkboard or piece of paper set up the same problem as a typical division problem. You do the math and let your student see you come up with the same answer as he did without all the paper distribution. Tell him that there may be a few more things that he needs to learn but soon he will be able to work the "how much money did each runner receive" problem with more efficient skills of long division.

Applied Math: Catching the Clues for Figures

How old, according to the story, is Joshua? How can you tell? Read that part of the story again and listen. Can you figure it out? The author says that Joshua has been running for 50 years since he was 10 years old. That would make Joshua Summerhayes 60 years old. You can figure this out, even though the story never says *specifically* that Joshua is 60, if you pay attention to the clues.

This would just be a guess, but how old do you suppose Aunt Millie is? There is no real clue but if you think of ages by generation, then Aunt Millie (being the sibling of either Joshua's mother or father) could be as much as twenty years older than Joshua. So Aunt Millie could possibly be in her 80s!

Science: Flora of Australia

Teacher's Note: Flora is a special scientific word to describe the trees and plants of a specific region or period. Mention this word to your student but it is not neoessary that he memorize it. In years to come, he will quickly recognize it in his science lessons.

In *The Pumpkin Runner* there are some specific plants and trees mentioned. Let your student list these and help him with ones he might miss. His list could include: Gum trees, eucalyptus trees*, wattle grove, etc. They must have had pumpkins in Australia, too! Find a simple book on Australia and add some additional common examples of the flora found there. Have your student list and draw some of these Australian plants and place the work into his science notebook. *[**Teacher's Note:** You could find some eucalyptus, so your student can smell its pungent smell. Florist shops and the large chain hobby stores, are a good place to look!]

Science: Botany - Pumpkins

Has your student ever wondered about the fact that there are so many different kinds of plants? All the kinds that he has seen himself are only a small fraction of the total number of plants in the world. Of those known plants can he think of any plant that are called by several different names? (The Monarda is a flower that grows by the roadside and is also called, Bee Balm and Oswego Tea. Maybe you know of an example that is more relevant to your particular student.)

So how do scientists find a specific name for all these plants so that when a person talks about a certain plant every scientist in the world knows exactly which one he is talking about? Scientists have solved this problem of a plant's multiple common labels with a classification (or naming) system developed by a Swedish scientist named Linnaeus. The system of scientific classification of plants which Linnaeus began in the eighteenth century (1700's) is still used (with a few changes) and allows scientists to know exactly which particular plant is being discussed.

Therefore, the Monarda flower, having several common names, mentioned above would be called *Monarda didyma* by scientists. Monarda didyma is the brilliant red

Monarda. In gardening catalogs the other colors (purple, rose, etc.) would have different species names.

While pumpkins are related to the squash family they actually belong to the gourd family whose family name is Cururbitacea, genus name *Cururbita* and then there are several different species of pumpkins. Your student might enjoy looking in a gardening book or seed catalog for some of these different types of pumpkins. The name for the large October orange pumpkin is *Cururbita pepo*. (Don't become discouraged, in many gardening catalogs plants are listed by a common name, often in the back of the catalog they will re-list the plants with their scientific names. If you want your student to examine such a magazine or catalog just search for one that has the scientific names listed either by the plants for sale, or in some type of extra index.)

Pumpkins are rich in vitamin A and potassium. People enjoy making pies, quick breads, cookies, cakes and soups from the delicious pumpkin. It certainly seems that Joshua Summerhayes loved pumpkins—almost more than anything!

Perhaps you have the room to let your student grow some pumpkins. Whether you grow the mini-type or the sugar pie-type (sweeter and richer than the large October ones) or the large fall decorating pumpkin it would be fun to see the progress of your own pumpkin patch. There are so many lessons to be learned with such a project: flower and pollination, soil conditions, water needs, insect pests, etc. If you grow a larger pumpkin, try carving your student's name in the outer skin (not too deep) and see if the name grows along with the pumpkin!

Science: Physics - Buoyancy and Density

While Joshua Summerhayes ran in a contest to see who was the fastest, your student can also conduct a contest, with pumpkins, to see which ones float the best! Gather together as many different sizes of pumpkins as you can find. (Have one or two of the mini-pumpkins, the ones that are about the size of an apple. Then include at least two more sizes—a small pie-type pumpkin and a regular large pumpkin.) Have your student make a chart of the pumpkin sizes with two boxes next to each size that say: "Float" or "Doesn't Float" Now fill a sink 1/2 full of water and tell your student that he is going to test each size of pumpkin and see if it floats or if it does not. First, ask your student for his hypothesis: What does he think will happen and why? Then let him test his hypothesis by setting one pumpkin in the water and seeing if it floats. Have him mark the appropriate box. Why did your student find? Did he find that the miniature pumpkins were much more difficult to float than the really large pumpkin? That seems like a sort of mystery. Why does he think that might be? While your student is watching, cut the pumpkins in half. Let him examine the center of large pumpkin and of the small pumpkin…does he see any difference? Usually the biggest pumpkins have proportionally a much larger hollow space in the center. This hollow space filled with air causes the larger pumpkin to be more **buoyant.** Perhaps your student will remember the hollow barrel on the little boy's back in the *Five in a Row* Volume 1 lessons for *The Story of Ping*? That hollow wooden barrel, full of air, helped the little boy float and stay safe in the water.

Older students may have already heard about buoyancy and you can review briefly and then use this same lesson to talk about density. Density is the mass per unit volume of an object.

You can continue this exploration of density of matter if you have a small rock and a larger pumice rock. The small rock will sink while the larger pumice piece will float (it is full of air holes. The holes cause the pumice to be not as dense (the materials which make up the rock are not as closely packed) as the small rock. This experiment shows that it is not just the size of an object that determines whether it will float or not—the **density** (how tightly packed the molecules) of the object plays a significant part.

Science: Fauna of Australia

(Teacher's Note: Fauna is a special scientific word to describe animals of a specific region or period. You can mention this to your student but it's not necessary that he memorize it. In later years of science lessons, he will quickly recognize the familiarity of this word.)

Let your student follow throughout the story making a list of Australian animals that he hears mentioned. His list might include: sheep, wombat, cockatoo, bandicoot, koala, wallaby, platypus, etc.

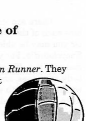
Let him pick an animal or two with which he is unfamiliar and help him research these animals. Help him discover what they look like, where in Australia they live, what they eat, and special facts about how they live. Have your student put this information, illustrated with art clip or hand drawn, or magazine pictures, in his science notebook.

The Great Barrier Reef of Australia is famous for its corals, many beautiful fishes and other marine life. Check the lessons for *Arabella* for information on coral.

If you can find the book *The Old Woman Who Loved to Read* by John Winch, your student will enjoy seeing many of the same animals he learned about in these lessons. Notice the illustrations of the seasonal Australian fires and learn more about them as well.

Science: Physics - The Physical Science of Hot Air Ballooning and Buoyancy

Reporters rush for a view and stories of the race in *The Pumpkin Runner*. They even use hot air balloons to get an aerial view. Explain to your student what an aerial view is. Just like he may have studied in *The Glorious Flight*, an aerial view is looking over something from high up in the air.



Has your student ever seen a real hot air balloon or had a ride in one? Does he understand how they work? Floating in air, a hot air balloon utilizes the principle that hot air rises. A small but powerful burner is turned on and the flame heats the air inside the balloon. As the air is heated, the molecules spread further apart and some of the air is forced out of the balloon. When the surrounding air is **more dense** than the heated

less dense air inside the balloon, it allows the balloon to become buoyant and it rises. An object like a cloud, feather, hot air balloon, etc., will float in the air as long as it's density is less than the surrounding air. In the first days of ballooning there was no control to how high a balloon could fly, how far it went or where it came down. Today, the burners can be opened to heat more air (and cause greater rising) or closed to cool the balloon's air and allow descent so there is much more control. To prevent the balloon from going higher than the operator of the balloon intends, the flyer turns down or off the burner and the balloon will drift and then begin to sink. More heat causes the balloon to rise again, etc. The operator and passengers of the hot air balloon as well as the burner unit sit in a basket that is attached to the balloon fabric by tape-like cords.

Temperature of the day and winds play a part in how much fuel for the heating flame is used and how the balloon flies. If you see a hot air balloon in flight, listen for the roaring sound of the burner being turned off and on at intervals. This sound can be heard quite easily even when the balloon is fairly high.

(**Teacher's Note:** For an older upper grade school level student, you may want to explain that hot air rises because as it is heated it expands or spreads out, and has less weight per cubic volume than colder dense, closely packed air molecules. Your older student may also want to check *The World Book Encyclopedia* for many interesting facts about balloons, their history—such as their role in warfare, and balloon's many uses including weather monitoring.)

Science: The Anatomy of Running - Bones, Muscles, Joints and Ligaments

The Pumpkin Runner gives you the opportunity to study any of the following elements of the human body: bones, muscles, joints or ligaments, or all four and how they work together. First review any information in your student's science notebook that you have already covered on bones, etc. Then using the sports theme of running, add new information and show how the parts of the body work together to allow walking, running, etc.

There are simple books with good illustrations, at the library, that explain how each of these parts of the human body work and how they work together. Or you may be able to find the information you desire in *The World Book Encyclopedia*. For your young student, a very brief overview of this kind of material is sufficient. Such an overview might include the idea that inside our body are bones, and muscles—each of which have different kinds of cells and which, along with parts of the body called joints, tendons and ligaments allows us to move our bodies in a variety of directions. Show them pictures from your books of the body skeleton and pictures of how the muscle masses are arranged over the bones.

Your student may be interested and amazed to know that there are three major bones that make up the leg (femur, fibula and tibia), a bone called the patella (kneecap) and twenty-six bones that make up the foot. Since bones by themselves cannot move, the muscles, ligaments and tendons are what enable a person to have a range of motion. There is an important tendon called the Achilles tendon* with attaches the calf muscle to

the back of the ankle along with a variety of muscles, ligaments and tendons along the front and back of the leg and foot that allow a person to move, walk, jump, skip and run!

[**Teacher's Note:** As a side topic, there is, in Greek Mythology, a man named Achilles and the story of his mother's attempt and failure, to make her son immortal. If you desire you can review and mention this story to your older student to help him understand the origin of the name of this tendon in the human body.]

For your older *Five in a Row* age student you would want him to find information in the library books and have him make some notes on what he has learned. This is accomplished by reading the simple book together once and then going back and asking your student what he thinks the most important points of information are? What does he think he should write down? Add any you think necessary, and have him make his notes on paper and draw illustrations from the book that will help him remember the concepts. These pages he can place in the Science portion of his notebook. For those who love artistic details, cut outs or drawings of runners or races could decorate the edges of the notebook pages as well.

Three wonderful resource books on the Human Body (which will be valuable for many additional topics) are: *Blood and Guts: A Working Guide to Your Own Insides* by Linda Allison This book is in print at the time of this writing, and is also available at libraries. It has an excellent chapter on muscles, etc., with working models that you can make from household materials. *Blood and Guts* does have some evolutionary references so it is best used as a resource book by the teacher who presents what she feels is appropriate. This book has been a favorite with homeschoolers for over twenty years. *Start Exploring Gray's Anatomy*, by Freddy Stark, Ph.D., a coloring book that can be used and reviewed over again for years, is another resource that your student might enjoy. Also see Janice Vancleaves's *The Human Body for Every Kid: Easy Activities That Make Learning Science Fun*.

If you cannot obtain these books there are many good books at the bookstores and at your library that will give you the necessary information.

Science: Physical Fitness

Use *The Pumpkin Runner* as an opportunity to talk about physical fitness! Does your student think that Joshua was physically fit? What does that mean? Physical Fitness includes areas such as exercise, nutrition, normal weight, blood pressure, etc., and getting plenty of sleep. Keeping oneself physically fit is even part of being a good citizen! In this way one will be able to do his work (and play) at optimum levels of efficiency. Keeping fit physically is important for bright mental alertness as well. The President's Challenge Physical Activity and Fitness Awards Program is one way to check on how you are doing and to work on improving your physical fitness. Try these websites: **http://www.indiana.edu/~preschal/** and **http://www.fitness.gov/funfit/funfit.html** for interesting information on fitness for children. Using the President's Challenge or other program begin a workout or exercise schedule and chart daily what your student does and let him notice the progress that he makes.

You can continue learning about physical fitness by discussing any of the following:

Importance of stretching before sports or walking, like the runners flexed and stretched in the illustrations. (Again the fact that Joshua didn't was part of the bigger than life tall tale aspect of the story.) From your knowledge of how the muscle fibers are constructed (they are long and stretchy like a rubber band. But like a rubber band that breaks, if muscles are stretched too far too fast they can be injured. With a thick rubber band try pulling it to the breaking point and note how many inches that is. Now pull and release the rubber band as if you were warming up a muscle by stretching it. After six or seven pulls and releases can you more easily—with less danger of breaking the band—stretch it even more inches than you could at the first try? This a simple demonstration of why **muscles need to be warmed up and stretched out before strenuous exercise**.

Importance of good **nutrition**—cells make up bones, muscles and ligaments as well as all parts of our bodies. Find an encyclopedia or good book on the human body that shows what muscle cells, nerve cells, bone cells, etc., look like, because each type of cell is different. Let your student draw illustrations of these types of cells and label them for his Science notebook. These cells need certain elements of nutrition to stay healthy. A diet rich in vitamins, minerals, and other nutrients will help a person perform at higher levels that a body where the cells are starved by poor nutrition. When one does strenuous exercise (like running a marathon) the body needs good nutrition and lots of water! Find a good simple book on nutrition and enjoy exploring how sound nutrition helps us stay physically fit in so many different ways.

One of the peripheral aspects of physical fitness is the importance of proper attire while exercising—especially shoes and clothing. The fact that Joshua wears his overalls and gum boots and still wins is part of what makes this true story still have the aspects of a tall tale!

Bible Lessons

Who would think that a tale like *The Pumpkin Runner* could have so many Biblical connections? For one thing, in your discussions on bragging and cheating there are many verses to which you could point your student's attention for instance regarding bragging. Romans 12:3 and 13:16 admonishes not to think of yourself more highly than you ought, while 1 John 2:16 talks about the boastful pride of life that is *not* from the Father, nor is it *like* the Father. Then Proverbs 11:1 along with Exodus 20:15, and Ephesians 4:28, lets His people know that the Lord does not want His children to cheat or steal.

Romans 12:3, 13:16
1 John 2:16

Proverbs 11:1
Exodus 20:15
Ephesians 4:28

To sum it all up, 2 Timothy 2:5 suggests that if anyone competes as an athlete he does not win if he does not compete according to the rules. Your student, depending on how much involvement he has had with sports may say, "I know people who have cheated and won." Talk with your student about winning on earth and winning in the Kingdom of God. It is very like the example of the serpent in the Garden who told Adam and Eve that they could eat the fruit. The Lord had told them if they ate the fruit they would die. The serpent said they would not. They ate it and did not die immediately. But they did eventually die, just as the Lord had said. If the Lord says we won't win if we don't follow the rules, He does mean it. There are ways that we will be losers if we cheat, even if the results are not immediate.

2 Timothy 2:5

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When Joshua wins the race what does he do? He divides his winnings among all the racers! This is a wonderful opportunity to discuss Proverbs 23:4-5 about how to manage wealth. This verse says that one is not to weary ones self gaining wealth and Joshua Summerhayes certainly seems to be a good example of this verse. Romans 12:10 says to give preference to one another, and Romans 13:19 reminds us solemnly never to try to take our own revenge but leave room for the Lord to do that work. Joshua passes this test as well.

Proverbs 23:4-5

Romans 12:10
Romans 13:9

❧ ❧ ❧ ❧ ❧

Our story tells us that when Joshua divides the winnings among the other runners that he includes Damien Dodgerell. Remember Damien is willing to cheat to beat Joshua and Damien causes a collision for Aunt Millie and the borrowed Jeep. Nevertheless, Joshua gives him an equal portion of the money. This seems to be a most Christ-like thing to do. There is no guarantee, this might have made an impression on Damien,

but regardless, it was good for the heart and emotions of Joshua. Joshua's actions are reminiscent of Bible verses like Matthew 6:14 where it says to **forgive** and we will be forgiven, and as well Matthew 5:39-48 and Ephesians 4:31-32, about dealing with our enemies.

Matthew 6:14
Matthew 5:39-48
Ephesians 4:31-32

Bless your enemies and do good to those who those who do you wrong, Matthew 5:44, would be a good verse to bring up regarding the race that Joshua Summerhayes runs. He continues to be polite and kind to all, regardless of how they behave, and happens to win the race at the same time!

Matthew 5:44

❧ ❧ ❧ ❧ ❧

For an older student you may enjoy teaching about Joshua, from the book of **Joshua** in the Old Testament and just tying it into the story by the name Joshua from the story: Joshua Summerhayes. The book of Joshua is the sixth book of the Old Testament.

Joshua

The character of Joshua reflects character of Jesus in several ways: they both cared for the sheep. Joshua cared for the real animals called sheep, and in Jesus' case He says He is the Good Shepherd and cares for his sheep—or his people. Jesus takes good care of His sheep. You might enjoy using this story tie-in and talking about the ways that Jesus cares for His own, including the parable Jesus teaches about searching for the lost sheep and rejoicing when it is found.

John 10:11-14

Matthew 18:12-14

Both Joshua and Jesus were humble, honest, and forgiving and the name Joshua means "saves" which is certainly what Jesus does for us!

The character of Joshua also reminds us of the story of **David and Goliath** when David refuses to wear King Saul's armor. I Samuel 31-50, specifically vs. 39. In the same way, Joshua Summerhayes doesn't want to wear the running clothes like everyone else…he is more comfortable being himself. Again, this shows humility. (Keep in mind however, that unlike the story of David, this story is a tall tale. Today most athletes wear appropriate clothing, shoes, and stretch, etc., before competitions.)

I Samuel 31-50 specifically vs.39

The Bible says that the *love* of money is the root of all evil. Notice it doesn't say that money is—it is the *love* of money, above other things. Damien Doggerell's character certainly shows that when the love of money supercedes love and respect for people, one's character does not look Christ-like. When people put their hearts into loving money, it gives the enemy great opportunities to tempt them into sin.

RECIPES FROM A PUMPKIN LOVER'S SHEEP STATION

In the rollicking good fun of a race through Australia, the foods below have a distinctly Australian flair. The pumpkin soup is amazingly, surprisingly good and full of energy. Then there must be some lamb, of course. This succulent roast will have everyone saying G'day! Serve it with roasted potatoes and roasted carrots.The Pavlova will call for a return performance and you will be so satisfied that you did it the Aussie way.

Chef's Corner: Pavlova is the traditional Australian dessert. It is easy to make, has no fat in the meringue base, and is simply beautiful in its presentation of whipped cream and colorful fruits. Beyond beautiful, it is scrumptious, as well! Also, it is interesting to note that recipes from Australia call for cornflour which in the United States we call cornstarch and vanilla essence, which we usually just call vanilla.

Pumpkin Soup

3 tablespoons butter
1 small onion, chopped
2 large cloves garlic, finely chopped
1 teaspoons curry powder
1/2 teaspoon salt
1/4 teaspoon ground white pepper
3 cups chicken broth
1 3/4 cups (15-ounce can) pumpkin
1 1/2 cups (12 fluid-ounce can) evaporated milk

Melt butter in large saucepan over medium-high heat. Add onion and garlic; cook, stirring frequently, for 2 to 3 minutes or until tender. Stir in curry powder, salt and pepper; cook for 1 minute.

Add broth and pumpkin; bring to a boil. Reduce heat to low; cook, stirring occasionally, for 15 to 20 minutes. Stir in evaporated milk. Transfer mixture to food processor or blender (in batches, if necessary); cover. Blend until smooth. Serve warm.

Traditional Aussie Lamb

4 1/2 l) leg of lamb
2 cloves garlic, chopped
fresh rosemary sprigs
2 tablespoons oil
salt, pepper
4 large potatoes
8 pieces of pumpkin
4 Tablespoons) butter
3 tablespoons oil
salt, thyme

2 tablespoons plain flour
2 1/4 cups beef stock (can be canned)
2 teaspoons Worcestershire sauce
2 tablespoons red wine

Preheat oven to 350°F. Cut small slits all over the skin of the leg of lamb. Insert garlic pieces and rosemary sprigs. Brush lamb with oil and sprinkle with salt and pepper. Fill a baking dish halfway with water and place a wire rack on top and then put the lamb on the dish. Roast for about 1 1/2 hours or until cooked as desired, basting often with the pan juices.

Peel potatoes, cut in half and score them with a fork. Combine butter, oil, salt and thyme.Toss potatoes in the mixture. Take potatoes out and keep mixture for later. Place potatoes around the leg of lamb after the lamb has been cooking for about 40 minutes. Roast for 50 minutes, brushing halfway through with a little of the butter mixture.

Toss pumpkin pieces in the mixture and place next to the roast after it has been cooking for 50 minutes. When everything is done, take the rack off the baking dish and place the rack on an oven proof tray. Return to oven to keep warm.

To make gravy, place the baking dish with the juices from the meat on the stove top. Discard all but 3 tablespoons of the juices. Heat the dish, stir in the flour and cook until brown. Gradually add beef stock, Worcestershire sauce and wine. Stir until the mixture boils and thickens, then simmer for 2 minutes.

Slice the meat and arrange everything on plates. Pour the gravy over the meat.

Serves 4

Pavlova

4 egg whites
1 cup superfine sugar
2 heaped teaspoons cornflour (See Chef's note!)
1/2 teaspoon vanilla essence (See Chef's note)
1 cup whipped thickened cream
2 blueberries or raspberries
3 kiwis
2 bananas
1 cup sliced strawberries

Preheat oven to 350°F. Grease a 7 inch round baking pan and dust lightly with a little cornflour. Beat the egg whites until soft peaks form and gradually beat in the sugar. Beat until the mixture is thick and the sugar is dissolved. Carefully fold in the cornstarch and vanilla essence. Spoon into the baking pan . Reduce the oven heat to 300°F and place in oven. Bake for 1 hour. Let stand for 5 minutes before lifting onto a serving plate. Allow to cool completely before spreading (to within 2 inches of the edges of the meringue) with

the whipped cream and then covering with sliced fruits and berries. Cut with a knife to serve, or just dig in and serve up with a spoon if you're wearing your gumboots, and afterwards sing a chorus of "Waltzing Matilda."

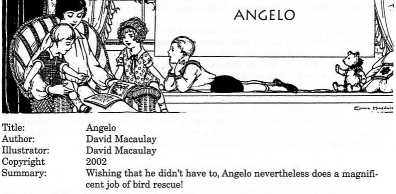
Purple Punch

How about serving a refreshing and bubbly purple punch with your Australian meal? You never know, it might help you win a race!

Grape Juice
Seltzer Water

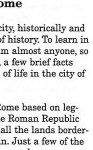
Mix equal parts of juice and seltzer water and serve over crushed ice!

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.



Title:	Angelo
Author:	David Macaulay
Illustrator:	David Macaulay
Copyright	2002
Summary:	Wishing that he didn't have to, Angelo nevertheless does a magnificent job of bird rescue!

Social Studies: Geography - The City of Rome



Remind your student that Angelo works in a city with many statues, and giant old stone works of architecture. Can he remember what city that is? (Rome, Italy) Does he know in what country Rome is and how to find it? Rome is a famous and very old city in Italy. Italy (previously studied in the *Five in a Row* lessons for *Papa Picollo* and *Clown of God*) is the European country, which looks like a long high-heeled boot jutting southward into the Mediterranean Sea. Help your student find Italy and then Rome and place the story disk there.

Social Studies: History - The City of Rome

Angelo lives in the city of Rome. Rome has been an important city, historically and culturally for over 2000 years. That means this city has a great deal of history. To learn in detail all the history of Rome and the Roman Empire would overwhelm almost anyone, so give your student a brief reminder of the ancient beginnings of Rome, a few brief facts regarding the changes during the Renaissance, and then a short view of life in the city of Rome today:

Ancient Rome: Various dates are cited for the founding of the Rome based on legend and history but in 509 B.C. the Republic of Rome was birthed. The Roman Republic grew to become an extremely powerful nation, eventually ruling over all the lands bordering the Mediterranean Sea, as what is now England, France and Spain. Just a few of the many influences of Ancient Rome that are still with us: the Roman Numerals we see used, Roman architecture (rounded arches, etc.), discoveries such as the use of concrete, and in our language where Latin the language of ancient Rome is used in the Scientific Classification System for Plants and Animals, in medicine, and law, and influences many

of our words as well. The now famous ruins and buildings of Rome, such as the Colosseum, the Forum, and the Temple of Hercules, and the Pantheon (not to be confused with the Parthenon in Greece) were built during this time.

During the Renaissance Rome flourished as a center for the arts, as well as science. It was during the Italian Renaissance that great artists like Michelangelo and others designed or built many of the churches and buildings now associated with the city of Rome. Many of the most famous statues ever created were sculpted during the Renaissance, as well as the building of many magnificent fountains.

Today Rome is the most famous city in all of Italy. Angelo must have enjoyed living there. It is a place visited by thousands of tourists a year. People come to see the beauty of Italy and this magnificent city encompassing over 2000 years of history, in addition to the art and architecture! Vatican City is a sovereign state tucked within the city of Rome. Vatican City is the headquarters of the Roman Catholic Church.

Social Studies: History - Restoration

Angelo worked at restoring old buildings. In Rome, "old" means buildings that were built several hundred years ago (as in the case of the Renaissance architecture) or a thousand plus years ago (as the ancient ruins)! Many European cities have centuries old buildings that need upkeep, and repair—in other words, restoration! The daily wearing down by the elements and pollution (sometimes from birds!) cause buildings to need repair and restorative processes. Removing the grime and dust and repairing broken places as well as providing new surfaces to these buildings helps keep them from ruin. Angelo has an important job!

Angelo uses a cement type plaster called stucco to provide the final hard stone-type finish for the walls of the building he is repairing. Stucco is still used today in many new buildings and homes. Though the ingredients that make up indoor and outdoor stucco are slightly different, stucco is used for both inside room walls as well as exterior finishes. Point out examples of stucco old and new to your student in his own neighborhood or city. Are there any old buildings, statues or fountains in your student's city that are in the process of being restored? Point those out to him as well and think of Angelo!

Social Studies: Character Relationships - Working with Passion

Angelo is an excellent example of one who cares deeply about his job of restoring special historic buildings. He works in all kinds of weather, and seems to have a vision of what he is wanting to accomplish (page 31). Some people go to work each day without vision, without the sense of accomplishment or of being productive. Without such positive personal incentives it is difficult do excellent work. How much better for Angelo to love what he does, and do his job with such care, pride and excellence! Ask your student if he knows someone who works like Angelo--who puts his heart and passion into his work? What kinds of jobs or careers does your student think *he* would like to do? Does he want to be Angelo's kind of worker?

Social Studies: Character Relationships - The Elderly

The story of Angelo, continues the look at people who are older than your student or his parents. Lessons for books such as *Night of the Moonjellies*, *Storm in the Night*, *Gramma's Walk*, *Clown of God*, *They Were Strong and Good*, *Mailing May*, *The Raft*, etc., all have grandparents or elderly persons in them.

In *Angelo*, your student follows the life of a man who has worked happily and has had a long life. He is, in fact, nearing the end of his life and wants to make sure that the one he looks after, Sylvia, is taken care of when he is no longer able to care for her. This is a desire of many older people. They look for ways to make sure that the ones they love, who will be living after them, are cared for. Discuss inheritance and life insurance and how people provide for their descendants.

The reader can tell that Angelo is slowing down and not able to do as much work in a day as he used to be able to do. He needs to rest more often. Has your student noticed similar behavior in older people around him?

At this time, Sylvia is a great encouragement to him. She watches, coo's her encouragement, brings him cool cloths and fans him with her wings when it is hot, listens to his ideas and plans, entertains him, and stays nearby until his work is finished. Even though these story characters are animals, your student can learn through the personification, that it is a wonderful gift for him to give his friendship and time and encouragement to elderly persons whether they are family or acquaintances. Those of advancing years often find a refreshment in being near younger people and enjoy time spent with them immensely. Encourage your student to watch for such special opportunities.

Social Studies: Foreign Language – Italian

Does your student know what the language is spoken in Italy? It is called Italian and Angelo uses an Italian word when he first tries to name his pigeon. Angelo says that he found the pigeon on Wednesday and so he should call her mercoledi. Mercoledi is Wednesday in Italian, and in that language the days of the week are not capitalized. The days of the week in Italian are as follows:

lunedi	Monday
martedi	Tueday
mercoledi	Wednesday
giovedi	Thursday
venerdi	Friday
sabato	Saturday
domenica	Sunday

also the word "per" is "for" and "grazie" is "thank you"

Language Arts: Comprehension

Sometimes when stories are read, even many times, the reader may fail to catch important details. Did your student comprehend the line on page 13 where Angelo declares his "professional dislike" for pigeons? A person whose passion is restoring great works of art to perfection is somewhat at odds with the very birds who cause so much damage to them. Remember the illustration on page 31? Yet, in spite of Angelo's professional dislike for these birds, Sylvia is helpless and Angelo will not leave her to her fate, but takes her home.

Also, on page 41 why is Angelo so happy and peaceful? Angelo has made provisions for Sylvia so that someday when he is no longer able to care for her, she will still have a place. This assurance makes Angelo happy.

Language Arts: Personification

Does your student remember the picture of the pigeons wearing hats? (page 20 and 21) These illustrations are not completely explained in the text as David Macaulay is leaving room for the reader's imagination. However, the "she" on page 21 refers to Sylvia. And here the author is proposing (through the literary device of **personification** (giving non humans, the attributes and capabilities of humans), that birds train "for the stage." The author is suggesting that different birds have various careers and that Sylvia is just beginning her career in the **performing arts**. Does that term mean anything to your student? What is considered a performing art? Let him think of the first word—performing. While the term "the arts"is considered all forms of visual art such as sculpture, painting, sketching or drawing, photography, architecture, pottery and porcelain works, etc., the word art also encompasses the performing arts such as singing, dance, theater, performances with musical instruments in solos, duets, quartets, orchestras, bands, as well as pantomime, opera*, etc.

Watching the pigeons in this story it looks as if they might be practicing some acting parts, but on page 28 the reader can see them dancing, too. Just perhaps, they are trying out all forms of the performing arts!

*When one thinks of opera, one often thinks of Italy. Historically, opera began in Italy in the Baroque music period of the 1600's. (See Teacher's Note on Musical periods at the end of this lesson). A few of the famous Italian **composers of opera** are: **Verdi** (*Rigoletto*, and *Aida*), **Rossini** (*Barber of Seville*), and **Puccini** (*Madam Butterfly*).

Later the art form spread to other European countries and composers like Mozart, Beethoven, and Wagner, etc., composed operas as well. For an interested student, an **opera** is a theatrical play-type performance where most of the lines that would be spoken in a play are sung instead. An opera has a **libretto** (meaning "little book") that has the words or text of the performance, and a **score** which is the music written for each particular opera. Many people feel that opera is special because not only is there a story, but the swelling tides of the musical compositions and the emotional performances of the singers seem to evoke even greater emotions in the audience than in a spoken play.

Because opera began in Italy and because many other people who greatly influenced music were Italians, Italian (along with some Latin) became the "language of music." Many terms for musical compositions (not just opera), voices, and instrumentation as well as the names of some instruments are Italian. Perhaps your student already knows some of these words and did not know that they have come to us from the country shaped like a long boot--the country where Angelo lived.

a cappella-- singing without instrumental accompaniment
adagio--very slow
allegretto--a little fast
allegro--spritely, quick
aria--a song for one or two singers, like a monologue but sung
sonata--one or two instrument piece in multiple movements
concerto--a solo instrumental piece
crescendo--increasing loudness
forte--play loudly
piano--play softly

Check out a CD or tape from your library of an opera (some are in English but many are in Italian) and let your student listen to a portion of it. There are also recordings of the just most famous parts and pieces of opera that you might enjoy also. Remember that just a small introduction now is all that is necessary. In the future, your student will be pleased that he knows a little something about this art form.

(**Teacher's Note: For teacher's information *only***, you might enjoy recapping the periods of classical music. Below are listed approximate dates and a few composers, some of whom will overlap. The information below is brief and omits the unique characteristics and inventions of each era. You can find these, if you wish through Internet research of Classical Musical Periods or by using an encyclopedia. This is *not* in any way information expected or required for your student to know, but just for you to review for your own enjoyment.)

Medieval (before 1450)

Renaissance (1400-1600) works of Palestrina

Baroque Era (1600-1750) Vivaldi, Pachelbel, Scarlatti, Bach, Handel

Classic Era (1750-1820) Hayden, Mozart, Beethoven

Romantic Era (1810-1910) Wagner, Beethoven, Rossini, Liszt, Schubert, Chopin, Tchaikovsky, Verdi

Impressionistic Era (1860-1900) Debussy, Ravel

Neoclassic (early 1900's) Stravinsky

Language Arts: Vocabulary

pediment	the triangular portion, just below the peak of the roof of building built in the Greek architectural style
scaffold	a temporary (removable) structure that hold ups workmen during times of the building or repair of buildings—picture in the story on page 22)
cherubs	short for cherubim, an order of angel, sometimes symbol ized by the figure of a child with wings
stucco	a hard type of plaster used to cover walls
trowel	workman's tool, can be used for applying stucco to walls
court yards	a space enclosed by walls inside or near a building
traction	(not in text) a method of keeping an injured limb immobile
piazzas	an open public square in towns and cities of Italy
evangelist	a preacher of the Gospel
carafe	(not in the text) a bottle for serving water or beverage at the table
grueling	extremely difficult and tiring work
toil	to work hard
recuperation	to recover from an injury or illness or loss
nook and cranny	a saying that means in every little spot
abandoned	empty, as in an abandoned nest

Art: Observing Details

David Macaulay illustrations are delightfully full of detail, humor and feeling. Have your student notice that the man on the motorcycle who appears on page 9 may be the same one on page 45. Have him notice, too, the picture on page 13 where Angelo is taking Sylvia to work—are those her beak and feet sticking out of the bag? Angelo is creative man. The red directional blocks on page 8 show just how hard Angelo looked for a place for Sylvia before taking her home. What about the view on page 21 where Angelo and Sylvia are both wearing red scarves? Does your student appreciate the humor in the illustration on page 31 where Angelo and Sylvia have differing ideas on how the old buildings look the best?

Does your student enjoy the picture on page 20 with only the feet of some people showing? Perhaps it is a father and daughter or an older brother and his younger sister. A view of just feet is unexpected and humorous and fits exactly with the pigeons in their theatrical garb!

And, where is Angelo's place and how does your student know? Angelo lives in an apartment building. In the picture on page 10, your student can see Angelo coming out of his upper story apartment onto an outside terrace (a small patio or piazza). Pages 42 and 43 show illustrations of some buildings. Can your student locate Angelo's place? (If he has any difficulty with this exercise, have him look for the terrace with the chair and table.)

The first page inside the brown paper leaves shows sticks and feathers in array, sort of symbolizing the broken-ness of the hurt pigeon in the beginning. But, by the end of the story, everything has come together for Sylvia and so have the sticks and feather in the illustration on page 48. The design of the stick and feathers is in an "A" for Angelo whose name is amazingly close to angel--like the angel of mercy that he was to Sylvia.

Art: The Need for Art

The story of Angelo conveys a theme of the love of and importance of art in people's lives. Angelo lovingly restores old buildings to save the works of art and beauty they reveal. He also values music and the visual arts as seen in his poignant hospital room for the pigeon in which he hangs a picture of Sylvia's former home, and the way he shares his favorite music with his pigeon patient. Art is an important outlet for feelings or emotions, and for creativity. Angelo enjoys the art and natural beauty around him and is so much the richer for it. Does your student have a deep appreciation for paintings, music, sculpture? Are there ways you could very gently expose him to more of the arts. He might find works that he can begin to appreciate strongly, just like Angelo.

Art: Inspiration

Where did Angelo get the idea to create a permanent nest for Sylvia? Where do artist's ideas come from? Inspiration is a word used to describe the creative idea process of art. Artists can be inspired by almost anything around them or things that they imagine. The color of the sky, the texture of a plant, the strange expressions on an animal's face, anything can be that inspiration that sends the artist into a creative venture. Can your student remember what gave Angelo the idea for the permanent nest? (Angelo is trying to think of a way to care for Sylvia when he is gone. He is twirling his linguine when inspiration strikes! He gets his inspiration right from his dinner. Have your student look at page 40 and then at page 46—and there you have it—from linguine to nest!)

Your student can be watching for ideas to spark his own creative efforts. And when he sees a color, or shape or object that inspires him to draw, paint or sculpt, he can remember Angelo.

Art: Introducing a Variety of Music Genre

Angelo loves music. How can your student tell this by reading the story? When someone loves the arts—in this case music, he often shares his enjoyment with others. In David Macaulay's story Angelo make it possible for Sylvia to hear his favorite music.

Since Macaulay did not name Angelo's favorite music, you and your student can make a game out of "What 'might have been' Angelo's favorite pieces of music?" (This is reminiscent of Jacqueline Briggs Martin's story *The Finest Horse in Town* where the author keeps changing the story. She changes it by saying, "We don't actually know, but maybe it happened like this…then again, maybe it was like this…")

There are so many possibilities for what Angelo's favorite music might have been. It would be great fun for your student if you had on hand, four or five different types of music to listen to for a couple of minutes before he decides what he thinks Angelo might have liked. (You could have a piece of Blues music, a bit of Jazz, a Classical piece, some Opera, Contemporary music, Appalachian Mountain music or Country-Western music. Just let him listen to two minutes of each and remember Angelo! Then just for fun, decide what he thinks Angelo's favorite might have been. (And it wouldn't be incorrect if your student decides that Angelo loves all kinds of music.)

Make sure that you and your student share with each other what your favorite kinds of music are, as well.

Art: Aerial View

David Macaulay spends a great deal of artistic effort on taking the viewer of the illustrations from the street looking up to the skies looking down. The first illustration is seen from underneath. The viewer, from a view point of underneath the scaffold sees, Angelo's feet and the lower part of his broom. Yet, there are many pictures where the viewpoint is high above the characters in the story. Let your student go through the pages and note the ones that are aerial views. (Some of them are found on pages 8, 10, 17, 24-25, 44-45, etc.)

David Macaulay's illustrations taken all together (from low to high, and high back to low), grant to the viewer a wonderful feel for the city of Rome and the tall buildings there.

Have your student look at page 43. Does he see a pigeon sitting on the rooftop above Angelo's place? Could that be Sylvia? Turn the page to the funeral scene. This illustration is from quite high above the ground. Could this also be Sylvia looking down on Angelo's funeral from a high rooftop? Turning the page one more time you can see Sylvia for sure in her special nest, with her babies, looking out over the city of Rome.

Art: Theatre

In Angelo, the pigeons are used to introduce the subject of the theater! How humorous it is to imagine that birds might behave like people, taking parts and learning

scripts and having costumes! This is indeed personification. But apart from the aspect of personification the pigeons offer an opportunity to discuss a topic or two of the theater.

Has your student ever been to the theater? Has he ever seen a live performance play? If so have him recall his experiences. What would your student say the difference between a television production and a theatre production is? (A theatrical play is a live performance, usually given a number of times, over many days. Some theatrical performances have run for years with the exact same play being performed each day. A television show may be long running with the same actors and actresses but each episode is different. In both the theatre and television acting, make-up, costumes and scripts are important. But in the theatre the make-up is often different. Since people are watching the play far away (in the back rows) as well as close up, the make-up is often more vivid and applied so that it can still be seen from the back of the theatre. As for the actors, gestures and voice must be appropriate to reach and be understood at the back of a theatre. In television, actors are often on a sound stage and many of these factors do not apply.

Show your student a play script or let him see a play of Shakespeare. This will allow him to see how a play is read, with each speech changing and labeled as the character who is speaking changes. Also, it is fun to see stage directions ("enter stage left," "coughs into his hand," "exit stage right," etc.) Ask your student if he thinks it would be easy or difficult to memorize all the lines of a major role in a play. Actors and actresses need to be able to memorize quickly, as well as present their lines with believability! This is called acting.

If you have an excellent children's theatre in your area, make plans to take your student to a play

Math: Geometric Shapes

The picture on the last page of the story has a nest under a triangle. Point this triangle out to your student and see if he knows what the name of the shape is. If he knows the basic plane geometric shapes…rectangle, triangle, circle, and diamond go on to the more advanced shapes such as pentagon, hexagon, and octagon. If those are already understood try the solid geometric shapes such as a cube, pyramid, cone, sphere, prism, cylinder, etc.

For a project, have some saved cereal boxes, cardboard tubes of various sizes, and some poster board for fashioning cylinders and cones. Let your student make a creative art piece from these geometric shapes. Your student might even like to construct the types of buildings he sees in Angelo's Rome. However, his creation can be a model of something real, or completely imaginary—as a work of modern art.

Math: Roman Numerals

Since you are studying Rome, because Angelo and Sylvia live there, you might want to review Roman Numerals. Roman Numerals are often used at the end of movies to show the year it was made. Sometimes older structures have the date of the building written on its cornerstone in Roman Numerals. Roman Numerals are also com-

monly used in making an outline (outlining) an essay or a speech, etc. Your student will also see them on the faces of clocks and watches. Have your student watch for Roman Numerals and note where else he might see them.

Math: Centuries and Hundreds

If your student remembers that there are one hundred pennies in a dollar, then it should be easy to remember that there are one hundred years in a century. He may also find it interesting that a **centurion** was a Roman soldier commander of a unit of a hundred men. In the metric system, then, a meter that is divided into **centimeters** would have how many centimeters? (100) The Celsius Scale for temperature is sometimes called the **centigrade** scale because the measurements are calculated with 0 degrees Celsius being the freezing point of water to 100 degrees Celsius which is the boiling point of water. (In this scale you can measure negative temperatures as well as those over 100 degrees--in other words you can have -29 degrees Celsius or +209 degrees Celsius.)

History is divided into units of one hundred years, called centuries, beginning with the birth of Christ. Just like the day and night time is divided into hours for clarification and ease in communication, the years of history are also divided in different ways--one of which is into the hundred year increments called centuries. (Teacher's Note: See Math Lesson on Century in *Grass Sandals*).

Math: Introducing the Concept of Ratio

Can you believe that the mathematical concept of ratio can be taught right out of a story like *Angelo*? Where could you find a good example? Well, Angelo mixes his stucco (a plaster type of mixture made up of sand, water and cement). There are certain amounts of each that he has to mix to come up with a plaster that will become hard and provide a protective long-lasting finish for the buildings.

A **ratio** is the relation between two numbers or quantities as expressed in a quotient (like a fraction). Therefore, perhaps Angelo has to mix two parts of water to three parts of sand/cement mixture. If so, then he would be mixing the two ingredients by the ratio of two to three or 2/3. (A ratio is sometimes also expressed as 2:3). There are many ratios used in cooking. The following recipe for Raspberry Vinaigrette has a ratio of 6 parts water to one part oil or 6/1 (six to one). (**Teacher's Note**: The oil has been named in eighths so that it is easier to see the relation between six eighths and one eighth—6 to 1!)

Italian Raspberry Vinaigrette

3/4 (or 6/8) cup very light flavored Olive Oil
1/3 cup Raspberry Balsamic Vinegar
1 Package of Good Italian Dressing Mix
1/8 cup Water

Pour the ingredients in a bottle with a lid and shake. Make a salad and the dressing for lunch while you and your student think of Angelo under the trees with Sylvia. You might even be able to have an **alfresco** luncheon together. "Alfresco" is Italian for "in the cool" or in other words, eating outside!

Science: Anatomy - Broken Bones

Bones are amazing. Even though they seem to be a solid substance, they grow and will mend themselves when broken. Notice in the illustrated bone cells at the right how easy it would be for the cells to mesh together and mend with strength? Sometimes when a human breaks a leg, a series of weights and counterweights called traction is used to help align the bone and keep it in the proper place to begin healing. After a period of time in traction, a cast is placed on the limb. Can your student see in the illustration on page 11, the traction type device Angelo makes for Sylvia?

Bones can sustain several different kinds of breaks (fractures*) but each type will mend with the proper care. A doctor realigns the fracture in a process called **"reduction"** (what a layman would call "setting" the bone). Usually a cast is placed around the arm or leg which **immobilizes** (holds in place so that it cannot move around) the limb and allows it to heal in proper alignment. The bone will form new connecting cells and heal itself back to it's original strength--maybe even a bit stronger directly surrounding the break. (**Teacher's Note:** Before the plaster cast came into use, broken limbs were sometimes strapped between boards or even just one board called a splint. Plastic splints are now used for muscle and ligament injuries, and sometimes air splints are used, but the old board splint (while useful in an emergency to immobilize and injury until professional help is available) is no longer widely used in countries with modernized medicine.

*Different types of **fractures** include greenstick (where the break is only part way through the bone, but the unbroken part may bend as a result), a simple fracture (where the break is complete across the bone), and compound fracture (where the break is complete and the bone also breaks the skin or tears tissue increasing the chance of infection). All types of fractures are serious and should be treated by a doctor so that proper healing will result. (**Teacher's Note**: See the Science lesson below on Bird Anatomy.)

Science: Zoology - Pigeons

Pigeons and doves are in the same family. Your student can see the family resemblance to the common pigeon in the feet and eyes of even white doves and mourning doves. Pigeons live in cities where they roost and nest on city bridges and buildings. Many people feed pigeons on the sidewalks and in the parks of the cities, as well.

In rural areas, they are found in farm yards, livestock facilities, grain elevators, and feed mills where they enjoy the grain found there.

Here is a website that shows the different colors (or morphs) of pigeons and shows the black pigeons like Sylvia. http://birds.cornell.edu/ppw/colormorphs.htm

Pigeons are ingenious in finding many places to make their homes. They will nest on roofs, ledges, drain spouts, lofts, church steeples, attics, and ornate architectural features. Pigeons do not build a typical rounded form bird nest, but they fashion a crude platform made of sticks, twigs, and grasses that are just slightly heaped together. Whatever structure they have chosen for roosting, acts as the nest and is what protects them from the weather.

Pigeons mate for life and the male is quite helpful in the feeding and care of the young which are called squabs. Pigeons are also scavengers and will eat garbage and food scraps provided by humans as well as grains and other foods.

One of the most interesting thing of all about pigeons is just watching their behavior. They walk along pecking at the ground with a sort of bobbing motion. Often you can see them in large flocks and enjoy their flight as well as their other characteristics.

In city areas where there are large concentrations of pigeons, there have been instances of disease spread when large accumulations of pigeon waste have been allowed to build up. In these cases, pigeons are not as welcome as they are when there are fewer birds to an area.

Here is a site for a famous painting of a boy holding a dove or pigeon that was painted by the artist Picasso. http://ppprints.com/picasso2.shtml#child-holding-dove

Besides providing entertainment at the park as the people feed the birds, people today enjoy having homing pigeons as pets. You can find a book about this at the library or search the Internet for information. One of the Arthur Ransome books in the *Swallows and Amazons* series is called *Pigeon Post* where the children care for homing pigeons. It would make a fine read-aloud for this time. David Macaulay has also written a book called *Rome Antics,* that is a wonderful addition to the study of *Angelo,* in which there is a scenic flight of a homing pigeon. There are still many fun facts to learn about pigeons from extra research through simple library books or by Internet search. Here are two good websites for you to enjoy: http://ehrweb.aaas.org/ehr/parents/Pigeons!.html (make sure you scroll all the way to the end of this one, and http://birds.cornell.edu/ppw/faq.htm.

Science: Zoology - Bird Anatomy

Bird's bones are remarkable in the way they are especially designed for flight. Bones that are separate in other animals are fused together for great strength even though many of the bird's bones are lightweight or actually hollow. Sylvia must have sustained a great trauma to be as hurt as she is when Angelo finds her on page 6.

In *The World Book Encyclopedia* you may find an excellent picture of a bird's skeletal structure. You may just want to look this over with your student or you can outline the bird shape and let your oldest student draw in the bones and label them as a project for his science notebook.

Isn't it interesting to think of Angelo knowing something about the anatomy of a bird so he could help Sylvia? He probably even did some extra studying in order to do such an excellent job with her.

Science: Physics and Human Body Temperature - Heating and Cooling

When the season becomes very warm, Sylvia dips a handkerchief in the fountain and brings it to Angelo so he can cool off. She also fans him with her wings to keep him cool. Can your student think of a reason why water and fans help cool a person? Part of the answer is in the concept of **evaporation**. Whether water is applied by a cool fountain dipped handkerchief, or comes from one's own body perspiration or sweat, the water molecules on the surface of the skin play an important part in the cooling of the body. When these water molecules evaporate from the surface of the skin, they removed excess heat along with them and consequently cool you.

So, your student may ask, how do the water molecules of sweat, etc., evaporate from your skin? In physics there is a principle stating that to convert water from a liquid to a vapor takes a certain amount of heat. The term for this heat is called the **heat of vaporization**. Heat energy increases the speed of the movement of the water molecules so that they can be converted to water vapor and escape into the air. (Remember that as these water vapor molecules escape into the air, they carry off excess heat from the body.) This process is very important because without it, our bodies would overheat. This is also why it is vitally important when one is in a warm climate or doing hard work or exercising that a great deal of water is consumed. Athletes even **hydrate** themselves (drink lots of water) *before* a grueling race or game so that they will be able to sweat and be cooled and so that their body cells have enough liquid to remain in top condition even though a great deal of liquid, is being lost through sweat. It is interesting to know that the volume of sweat that a person (not adapted to a hot climate) produces is about one liter per hour. However, if one moves to a hot climate in a few weeks time their body will be producing about two to three liters per hour! Electric fans, or fanning helps in the cooling process by moving more volume of air rapidly past the body to facilitate in carrying away (evaporating) moisture more quickly.

(**Teacher's Note**: Not all of the heat energy produced by the body is lost through sweat. Some is directly radiated from the skin to the air and some is lost through the respiratory surfaces of the lungs. This may be too much information and too confusing for your student. If he grasps the idea that water molecules being heated to the point they vaporize and escape into the air carry with them excess body heat, that is enough. You can certainly add to and teach more about this later, but it is included here just for your own information.

In addition, there is also the principle that when the humidity is higher, meaning that the air is already more saturated with water, then water on the body doesn't evaporate as quickly. Water evaporates more quickly from our bodies in hot dry climates which is why the body adapts and produces more sweat under those conditions. Again, this may be too much information for your student for this time, but you will understand how to bring more to such lessons in the future. Many of these lessons in heating and cooling can be re-examined at times in your student's real life situations, such as when he is sweating on a hot day, or exercising or doing hard work. You can also bring to his notice how he feels on warm days that are humid compared to warm days that are dry. Real life situations are the reason why we spend time learning about the world around us—so that we will know why things happen and how things work.)

Science: Inventions

Did your student think that David Macaulay was most creative and inventive in the illustrations of Sylvia's recovery room? The device for drinking while lying down is interesting and the system of traction for the bird's leg is creative. David Macaulay has another book on Rome and it even has a pigeon in it! It is called *Rome Antics* and it is a most creative work depicting the flight of a homing pigeon through the city. There are surprises in the flight as well as the ending. It would make a perfect supplemental book to the lessons for *Angelo*.

The subject of inventions and patents is interesting and your student would probably enjoy reading or re-reading *Steven Caney's Invention Book*. Another good book is *Girls Think of Everything: Stories of Ingenious Inventions by Women* by Catherine Thimmesh. And *The Picture History of Great Inventors* by Gillian Clements is a visual representation of inventors and their inventions written and illustrated in a manner much like the book on presidents, *The Buck Stops Here*. It is a delightfully enjoyable book. These and other books on inventors and inventions may be found at your library.

In Italy, the same country where Angelo lives, there once lived a man named Leonardo Da Vinci (1452-1519). Leonardo was best know for his wonderful paintings, but he also filled notebook after notebook with incredible drawings of inventions. While he did not complete many of these projects, they were instead rather theoretical inventions, he is credited with early drawings of a flying machine, waterwheel, helicopter, weapons, tanks, movable bridges, and much more. He was intensely interested in gears and levers and these were included in many of the ideas for his inventions. You might find some interesting information about Leonardo on the Internet or search your library for a simple book to introduce this amazing artist and inventor to your student. Find a way to tie Da Vinci in with your introductory study of Italy and think of this man who lived several hundred years before the story of *Angelo* takes place.

Has your student ever thought of an invention he could make that would be helpful to himself or someone else? Maybe he's drawn it out, thought about it but never tried to make it, like Leonard Da Vinci. Or perhaps his room is full of creations and inventions. Some people just have a special love for thinking about problem areas that need a solution, and how to make things work more efficiently. If your student is not one of those people, perhaps he knows someone who is.

Supplemental Books: *Leonardo and the Flying Boy*, by Laurence Anholt, *The Mad Scientists' Club* by Betrand R. Brinkley and *Andrew Henry's Meadow* by Doris Burn are all books where people (including children) are inventing things. *Andrew Henry's Meadow* is out of print and may be harder to find. Use Inter-library loan for that one. The children in Arthur Ransome's *Swallows and Amazon* series are also extremely creative and inventive.

Bible Lessons

The tale of *Angelo* by David Macaulay beautifully reminds us of the story in the Bible of the Good Samaritan. In the Bible story, a man who has been traveling from Jerusalem (probably a Jewish man) is robbed and beaten. Another man, a Samaritan finds him and gives him first aid, as well as taking him to a place of recuperation and paying for it himself. Between the Jews and the Samaritans there was not only "professional dislike" but religious and cultural dislike as well. Never the less, the Samaritan man took good care of the man who was hurt just like Angelo took good care of Sylvia even though he didn't even like pigeons! You can read the story of the Good Samaritan in Luke 10:30-37 and find that the Lord wants us to be full of mercy for the suffering of others in the same way that He, Himself is merciful. He says this will help us be good neighbors. Colossians 3:12 also shows us to have a heart filled with compassion.

Luke 10:30-37

Colossians 3:12

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Matthew 21:28-32

In Matthew 21:28-32 there is also the parable of the two sons. In this parable Jesus talks about a son who was asked to do a task. He said he would, but then he did not do it. The second son, when asked, said he did not want to, but later he regretted his decision and did the work. Angelo is like the second son, who really did not want to do the work of caring for Sylvia. He grumbles that he is a repairer of buildings not pigeons. He tries very hard to find someone else to do the job, but when he cannot he gives first aid and a compassionate home to the injured creature. Though he begins the task of mercy with an "I don't want to be doing this," attitude, he finishes the job creatively and with great care. Interestingly enough Angleo reaps great rewards of friendship with Sylvia in the end.

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When Angelo knew he was so old and tired that he was about to die and he was worried. What worried him? He wanted to know that Sylvia would be care for. This is what parents feel about their children--they want to care for them and provide safe environments and homes. You can see this type of care in the early scenes of Jesus life as Mary gives birth in the stable. And, as Moses mother carefully makes the reed basket to keep

him safe, as the boy's mother packs loaves of bread and fish for his lunch, but most of all in all the provisions that God the Father has made for us in the work of His Son Jesus Christ, and in all the ways he cares for us each day.

Does your student remember the line of the story where is says that Angelo looked carefully over the walls of the building for cracks? It says that he would have to repair these cracks before he applied the stucco. Did your student ever think what would happen to the beautiful buildings if Angelo did not have a good work ethic or integrity? What if when no one was looking, Angelo just applied the stucco over the cracked walls? He could say he had done his job but what would the results be? The stucco would soon crack and the work would have to be redone. Has your student ever heard the saying about not sweeping dirt under the rug? Obviously this saying came about because some people would go to the trouble to sweep a room but not bend down to pick up the debris. Instead they would just sweep the dirt under the rug when no one was looking as a lazy shortcut to their work. (This saying has since come to mean hiding anything that you don't want people to see and forgetting about it. But, in whatever context, the saying carries the concept of lack of integrity.) The Bible has a verse encouraging believers to do their work well remembering that they are doing it for the Lord (Colossians 3:17). Isn't it wonderful that Angelo was an honest man, full of pride in his work and with enough integrity to do his work well?

Colossians 3:17

RECIPES FOR INSPIRED ARTISTS IN ROME

Italy is known for its fresh seafood, pasta, fruits, olives and olive oil, and its wonderful desserts. Spumoni is a traditional Italian dessert that seems to intrigue the children as they enjoy the frosty ice cream and whipped cream concoction and find nuts and cherried candies as a surprise!.

Chef's Corner: Canned clams are cooked and ready to use. They can be added to a creamed cheese mixture, for instance, to make a spread and do not need to be heated. If you add clams to a boiling mixture, such as a sauce, without taking the mixture off of the heat, the clams will toughen. Be sure to remove your sauce from the heat source before adding the clams and the linguine.

Linguine with Clam Sauce

2 Tablespoons olive oil
1 onion, chopped
2 cloves garlic, chopped
Two 6.5-ounce cans minced clams
1 Tablespoon parsley
1/2 teaspoon basil
1/2 teaspoon oregano
1/8 teaspoon red pepper flakes (optional)
1/8 teaspoon salt
1/8 teaspoon pepper
1 pound linguine, cooked according to package directions

In a saucepan over med-low heat, sauté the onion and garlic in the olive oil for 5 minutes. Drain in liquid from clams to onion and garlic mix, reserving clams. Add parsley, oregano, basil, red pepper flakes, salt, and pepper. Simmer for 5 minutes. Remove from heat. Stir in clams, add cooked, drained linguini, and serve immediately. Red pepper flakes are delicious but spicy, so they are optional!

Rosemary Focaccia

3/4 cup warm water (105-degrees to 115 degrees)
1 quarter ounce package (2 1/2 teaspoons) fast – acting yeast
1/2 teaspoon sugar
2 cups all-purpose flour
1 teaspoon table salt
1 tablespoon freshly grated Parmesan
2 teaspoons chopped fresh rosemary leaves (leaves, not stem)
Kosher salt to taste

Lightly grease a baking pan, 13 by 9 by 2 inches. In a bowl stir together water, yeast and sugar and let stand until foamy, about 5 minutes. In a small bowl stir together flour and table salt and gradually stir into yeast mixture until mixture forms a soft dough.

On a lightly floured work surface with floured hands, knead dough 5 minutes, or until smooth and elastic, and shape into a ball. Invert bowl over dough and let rest 10 minutes. On lightly floured surface roll out dough into a 13 by 9 inch rectangle and transfer to baking pan, pressing into corners. Let dough rise, covered loosely with plastic wrap, in a warm place 30 minutes, or until doubled in bulk. Preheat oven to 400 degrees. Sprinkle dough with Parmesan, rosemary, coarse salt, and pepper to taste. Press indentations about 1/4 inch deep and 1 inch apart all over dough with lightly oiled fingertips and bake focaccia in middle of oven 20 minutes, or until golden. Cool focaccia in pan on a rack. Children love dipping foods they eat, so serve with good quality extra-virgin olive oil for dipping instead of butter. If they ask questions about olives and olive oil as they eat, all the better!

Spumoni

2 pints of Pistachio ice cream
2 pints of Strawberry ice cream
2 pints of Chocolate ice cream
1 cup heavy whipping cream
1/4 cup powdered sugar
1/4-1/3 cup candied cherries, chopped
1/4-1/3 cup pecans, chopped

Line a 2-1/2 to 3 quart ice cream mold, jello mold or loaf pan with foil so that it overlaps the sides of pan (Foil will help the Spumoni come out easier). Place your mold in the freezer.

In a large bowl, beat the pistachio ice cream until soft and smooth-but not melted. Spread ice cream on bottom and up sides of chilled mold. Return mold to freezer and freeze until firm. Repeat process with Strawberry ice cream.

Whip cream and sugar until stiff. Fold chopped cherries and nuts into whipped cream. Fill mold with cream mixture. Freeze. Beat chocolate ice cream until smooth, but not melted. Spread chocolate ice cream on top of whipped cream. Return to freezer and freeze until firm.

To serve, invert mold on serving dish. Using the overlapped portion of the foil or plastic wrap as handles, remove from pan. A spatula dipped in hot water can be used to smooth creases on the surface. Cut into slices and serve on a chilled plate.

Consider using this space to record some of your favorite learning memories of the past week. You may also want to include a snapshot of your meal together in this area.

Five in a Row Story Disks













Hey, Mr. Postman, Please, Please, Please

Sample Lesson Planning Sheet

Title:
Snowflake Bently

Author:
Jacqueline Briggs Martin

Illustrator:
Mary Azarian

Note: *Winner of 1998 "Caldecott" Award

Monday	Tuesday	Wednesday	Thursday	Friday
Social Studies	Language Arts	Art	Math	Science
Read story through, then:	Read story through, then:	Read story through, then:	Read story through, then:	Read story through, then:
Find Vermont on the map. Place Story Disk	Point out margin materials of interest.	Review the Caldecott award.	Work on counting by sixes.	Begin butterfly study.
Talk about "Green Mountain Boys"	Discuss "biographies"	Go to library and read several other Caldecott winners.	Explore Hexagons.	Field-Trip to the museum before lunch- then a picnic in the park and some butterfly collection. Don't forget to take the NET!
Discuss Willy's Persistence	Explore common "sayings"	Discuss woodcut. Go to art store to get materials to try woodcuts.	Make our snow/rain gauge using 2-liter pop bottles.	Get out the old microscope and introduce basic techniques.
Give example of time I was persistent and how it paid off at school.	Week's writing assignment: Story Beginnings	Talk more about photography. Have Uncle Bill show the children his darkroom and camera equipment.		Study Crystals.
	New Vocab: intricate, magnify, pelted	Do paper snowflakes.		

Sample Lesson Planning Page: *Snowflake Bently* has twenty one suggested lessons in the lesson portion of this manual. The sample planning sheet above shows twelve ideas that *could* be chosen for a one-week study. You are free to choose *any* of the twenty lesson ideas and keep track of your choices by noting them on the reproducible, blank Lesson Planning Sheet (Following page). For more ideas on making the best use of your *Five in a Row* curriculum, be sure to read the *How to Use Five in a Row* section of your manual.

Blank Lesson Planning Sheet (Reproducible)

Title:	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Author:	**Read story through, then:**	**Read story through, then:**	**Read story through, then:**	**Read story through, then:**	**Read story through, then:**
Illustrator:					

Literary Glossary

Literary Devices

Alliteration A succession of similar *sounds* (not letters) can occur at the beginning of words or internally. "Susie's galos*he*s made splis*he*s and splos*he*s..."

Apostrophe A way of addressing an absent person or some inanimate thing not usually spoken to. *"O, Moon!..."*

Hyperbole An overstatement or exaggeration: *"I've told you a thousand times!"*

Irony An event or outcome which is opposite what would naturally be expected: *"It was an irony of fate that the girl arrived just as her date left."*

Mood The feelings a work of literature brings to the reader: sad, for boding, boyant, etc., derived from the particular descriptive words chosen by the writer.

Onomatopoeia Representing a thing or action by a word that imitates the sound associated with it: *zoom, ping, ding-dong, buzz.*

Personification Where a thing, animal or abstract truth is made human, given human characteristics: *"The Man in the moon."*

Repetition The repeating of certain words, phrases, or ideas throughout a story or poem: "And I will take you home with me
Yes, I will take you home with me.

Rhyme Words where the ending *sounds* (not necessarily the letters) are the same: "Don't blame *me*,
go and *see*..."

Symbolism Writing that suggests more than the literal meaning. *"The innocent girl wore a white dress."* (White being a symbol of purity.)

Elements of a Story

Characters

A person, animal, or thing (wind, for example) that inhabits a story.

Point of view

Who narrates (tells) the story:

First Person–using I, me, etc.
Third Person–using he, she, they.

The point of view is usually the same throughout a short story but you will find some stories where it changes. Ask," who is telling this story?" Is the story told through only one character's view? (first person) Or through the overall view of the narrator? (third person)

Mood

The feelings a story stirs in the reader: calm, happy, sad, fearful, etc. The mood of a story can change, e.g., from an ominous beginning to a happy ending, etc. Sometimes there is a pervasive mood throughout a story such as wistfulness, etc.

Plot

The action, the story line. Includes:

Conflict	the problem of the story
Rising Action	the growing excitement
Climax	the high point of excitement
Denouement	the resolution or final outcome

Theme

The general idea or insight revealed in the story. The *heart and soul* of the story.

Setting

Where does the story take place: geography, town, a room, etc.? The time frame for the story: an hour, a day, a certain year or period of years, a season, etc.

Style

Someone once said, "Style is the *clothes* the words wear." In other words, how they are dressed-what *fashion* of words and sentence structure a writer uses to *outfit* his story. Many famous writers have distinctive styles. You can often tell by reading only a few paragraphs who wrote a passage. You would say, "Oh, that story sounds like it was written by ...."

Dictionary of Art Terms

Principles of Design

A picture usually follows certain basic principles of design including:

Center of Interest: the point emphasized in the picture. It should be differentiated by:

a.) Being larger or smaller than the other things in the picture.
b.) Being around or near the center of the picture but not usually in the exact middle.
c.) Being a different color, like a slightly darker red apple amid others for instance.
d.) Being a different shape, like the boat with the sail up on a lake full of boats with their sails down.

Unity: Any element of design which holds components of picture together any guides your eye around the picture. Can be line, color, etc.

Rhythm: Repetition of an element in a picture, the line, the color, shape, etc.

Balance: How the elements of a picture are constructed by use of symetry or asymetry.

Elements of Design

The *elements* of design are the tools an artist uses to follow the *principles* of design which include:

Line: The path traced by a moving point. Lines can be straight, curved, zig-zag (as in lightning), broken - - - -, dots....., or wavy.

Shape: The outward contour or outline; form; figure.

Space: *Positive space:* The house and the tree are positive space. (the objects drawn or painted.)

Negative Space: The space *around* the objects drawn. All the space in this picture that isn't tree or house. An artist makes choices in the amount of positive and negative space in a picture to make a pleasing work. Look at lots of examples of pictures and find positive and negative space and notice how much of each the artist uses.

Texture: Artistically representing an object's surface and how it would *feel*. (bumpy, smooth, etc.) Surface texture is unrelated to color, shape, etc.

Color: There are many components which make up the element of color including:

<u>*Color Hue:*</u> The name of the color: red, blue, etc.

<u>*Shade of Color:*</u> Black added to a particular color hue produces a *shade*.

<u>*Tint: of Color:*</u> White added to a particular color hue produces a *tint*.

<u>*Tone of Color:*</u> Gray (black and white together) added to a particular color hue produces a *tone*.

<u>*Primary colors:*</u> Red, yellow, blue. These colors cannot be obtained from mix. All other colors are produced by mixing these three *primary colors*.

<u>*Secondary colors:*</u> Orange (made by mixing red and yellow), green (made by mixing yellow and blue) and violet (made by mixing blue and red).

<u>*Tertiary colors:*</u> Made by mixing a secondary and a primary color. Yellow orange, red orange, yellow green, blue green, red violet and blue violet made by mixing the colors that the names suggest. (Brown *not* considered a ter tiary color) can be made mixing orange with a little blue and in other ways.)

<u>*Complementary Colors:*</u> Sometimes called opposites because of their place on the color wheel. In other words, if you look on your color wheel at red, the opposite color is green. Green and red are complementary colors. As red is added in small amounts to green and visa versa, the effect is a greying or neutralizing of the original color.

<u>*Warm colors:*</u> Colors that give a feeling of warmth, including the yellows, oranges and reds. These colors are chosen by the artist when he wants to show the warmth of the sun or a light or fire, etc. and when he desires to show symbolically the warmth of a scene, as a homey scene. (This is an *enormous* subject with many subtleties, but this is a simple, working definition for young students.)

<u>*Warm Palette:*</u> Limiting colors used for a picture to the warm color hues (list ed above), without using cool colors too (which is called *using a full palette*).

<u>*Cool Colors:*</u> Colors that give a feeling of coolness including the blues, greens and purples. (Again, this is a *simple* definition for primary students.)

<u>*Cool Palette:*</u> Limiting the colors used for a picture to only the cool colors (list ed above) without using warmer colors (which would be considered a *full palette*).

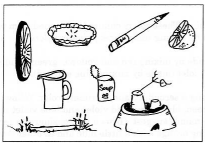
<u>*Full Palette:*</u> Using both warm and cool colors in the same picture.

Principles of Drawing for Depth (Perspective)

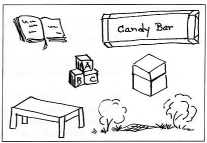
Surface: Making objects seem closer by drawing them closer to the botton of the picture that the other components of the composition.

Size: Drawing some objects larger than others will make them appear closer to the viewer.

Foreshortening: A method of shortening the lines of <u>any</u> object, distorting the image to give the impression of depth. Let's look at circles and squares as examples.



Foreshortened Circles



Foreshortened Squares

Overlapping: Drawing objects behind and partly obscured by the front objects in order to make the front objects appear closer.

Surface Lines: Lines used on an objects to give a 3-dimensional look, like the "wrapping around" of short lines to make a pencil seem round.

Intensity: Another method of producing depth by drawing or painting close objects with more color and detail than objects that are in the background. The background objects are drawn with less detail and often have *greyed color,* made by adding to the color used on the main objects mixed with a little of their complement (opposite on the color wheel). This *greyed color* is used to paint objects in the background.

Shadows: Shadows give depth to a drawing and are often used to cause the subject to stand out more clearly. Shadows cause the object to *come forward* in the drawing or painting. Shadows indicate the direction of the picture's light source.

With shadows, it is important to remember the light source in your drawing and keep consistant, having the shadows *all* flowing in from the same direction. The shadows will be on the *opposite* side of the light source.

Shading: Helps make things appear rounded or three-dimensional by the use of shadows.

Additonal Terms

Medium: The type of art material you use to create a picture. For drawing, you might choose: pencil, pen and ink, charcoal, chalk or oil pastel, crayon, colored pencils or markers. For painting, the choices include: oil paints, water colors, acrylic (a water based pigment that works like oil but dries more quickly), tempra (pigment is mixed with egg or other substances instead of oil), gouache (*opaque* water colors made by mixing pigments with water and gum) or finger paint (probably a type of tempera). We might say an artist chose oil paints *as his medium*.

View point: The point from which an artist views his subject. In some drawings and paintings, we find ourselves looking down on the subject as if we were perched in a tree. (*Angelo* is an example) In other pictures we might feel as if we were seeing everything from the view point of sitting or lying on the ground looking up. (*The Pumpkin Runner*)

Supplemental Book List

A Farmer's Almanac, by Mary Azarian, *(Snowflake Bentley)*

A Gardener's Alphabet, by Mary Azarian, *(Snowflake Bentley)*

Along the Sante Fe Trail, adapted by Ginger Wadsworth, *(The Gullywasher)*

Barn Cat, by Mary Azarian, *(Snowflake Bentley)*

Big Book of Books, by Dinah Zike, *(The Hatmaker's Sign)*

Blood and Guts: A Working Guide to Your Own Insides, by Linda Allison, *(The Pumpkin Runner)*

Boss of the Plains, by Laurie Carlson, *(The Gullywasher)*

Buck Stops Here, The, by Alice Provensen, *(Angelo)*

Calico the Wonder Horse, by Virginia Lee Burton, *(The Gullywasher)*

Carry On Mr. Bowditch, by Jean Lee Latham, *(The Hatmaker's Sign)*

Cloudy With a Chance of Meatballs, by Judi Barrett, *(Albert)*

Cowboy Dreams, by Kathi Appelt, *(The Gullywasher)*

Drawing Textbook, by Bruce McIntyre, *(The Raft)*

Discovering Nature at Sundown, (The Grass Sandals)

Eric Sloan's Weather Book, by Eric Sloan, *(Arabella)*

Favorite Poems Old and New, ed. by Helen Ferris, *(Mailing May)*

Foxe's Dream, by Tejima, *(Snowflake Bentley)*

Girls Think of Everything: Stories of Ingenious Inventions by Women, by Catherine Thimmesh, *(Snowflake Bentley)*

House at Pooh Corner, The, by A. A. Milne, *(The Hatmaker's Sign)*

Huck Finn, by Mark Twain, *(The Raft)*

Island Boy, by Barbara Cooney, *(Arabella)*

Just So Stories, by Rudyard Kipling, *(The Gullywasher)*

Katie's Trunk, by Ann Warren, *(The Hatmaker's Sign)*

My Great Aunt Arizona, by Gloria Houston, *(Roxaboxen)*

Old Henry, by Joan Blos, *(Higgins Bend Song and Dance)*

One Morning in Maine, by Robert McCloskey, *(Arabella)*

Owl Lake, by Tejima, *(Snowflake Bentley)*

Paul Bunyan and Pecos Bill, traditional tall tales, *(The Gullywasher)*

Pigeon Post, by Arthur Ransome, *(Angelo)*

Pocketful of Pinecones, by Karen Andreola, *(Albert and The Raft)*

Rand McNally Picture Atlas of the World, (Grass Sandals)

Robinson Crusoe, by Daniel Defoe, *(Arabella)*

Rome Antics, by David Macaulay, *(Angelo)*

Sierra Club Guide to Sketching Nature, by Cathy Johnson, *(The Raft)*

Sketching the Outdoor in Summer, by Jim Arnosky, *(The Raft)*

Songs of the Wild West, by Alan Axelrod and Dan Fox, *(Cowboy Charlie)*

Start Exploring Gray's Anatomy, by freddy Stark, Ph. D., *(The Pumpkin Runner)*

Steven Caney's Invention Book, by Steven Caney, *(Snowflake Bentley)*

Swallows and Amazons, by Arthur Ransome, *(Arabella)*

The Human Body for Every Kid, by Janice Vancleave, *(The Pumpkin Runner)*

The Old Woman Who Liked to Read, by John Winch, *(The Pumpkin Runner)*

The Swiss Family Robinson, by Johann Wyss, *(Arabella)*

Tim to the Lighthouse, by Edward Ardizonne, *(The Hatmaker's Sign)*

Tom Sawyer, by Mark Twain, *(The Raft and Cowboy Charlie)*

Tortoise and the Hare, traditional fable, *(Pumpkin Runner)*

We Didn't Mean to Go to Sea, by Arthur Ransome, *(Arabella)*

What An Awful Mess, by Robert Quackenbush, *(Snowflake Bentley)*

Where the Buffalo Roam, by Jacqueline Geis, *(The Gullywasher)*

Wind in the Willows, The, by Kenneth Grahame, *(The Raft)*

Winnie the Pooh, by A. A. Milne, *(The Hatmaker's Sign)*

Finding the Books

In our experience, a "typical" library may actually have half of the *Five in a Row* titles within *their own* system. The rest they will have to obtain through Inter-library loan (ILL). We've also observed that juvenile fiction is frequently mis-shelved because children examine books at random while mother makes her selections, replacing the books on the shelves *wherever is convenient!* The result is that even though the computer may indicate a given volume is "available," you may have a very difficult time locating it on the shelf.

We've found the most time-effective way to utilize the library system is to get a stack of library request cards from your librarian. Take some time to fill out several ILL request cards and put a rubber band around them, placing them in your purse or organizer. Keep them with you. Whenever you go to the library, simply turn in two or three cards for any titles that are not on the shelf and let *them* do the searching. *They* will locate the mis-shelved book when the computer indicates it's available. *They* will flag the computer to automatically "hold" the title for you when another library patron returns the book. *They* will request books via ILL and hold them for you when they arrive.

(Note- Some library systems and some librarians are still resistant to doing ILL, but that is changing. A recent article by one of the foremost authorities on library science in the world suggested that while ILL was practically unknown a few years ago, it is common practice today in most libraries. She went on to say that ILL will continue to grow as libraries inter-connect their computerized catalogs. She concluded by saying that a good librarian today should *never* tell a patron, *"I'm sorry but we don't have that book,"* without quickly adding, *"but I'll be happy to locate a copy for you!"*)

As your local library collects your requested titles they will call you every week or so to let you know another book or two is being held for you. Then, when you go to check out your new acquisitions, turn in two or three more cards and let them begin the search/request/hold cycle all over again. You will discover a comfortable rhythm of swinging by the library every two weeks or so and picking up your next title or two. It can be very painless!

Another note on the subject. One of the benefits of requesting a title is that often a library will eventually purchase the book if it's requested often enough. If the library comes up empty handed on a particular title, keep requesting it every few weeks. Encourage your friends to request it too! You'd be surprised how many wonderful books end up in the system that way.

A personal anecdote: A dear friend who began reviewing *Five in a Row* several years ago obtained *Who Owns the Sun?* via ILL. When she returned it suggested the librarian consider purchasing a copy for the local library. The busy librarian quickly brushed her aside saying, *"I'm sorry, but we've already spent our budget for this year; it's out of the question."* Our friend simply opened the book and began reading it aloud to the librarian right at the check-out desk! Before she was halfway through, the librarian was wiping away tears as she listened to the poignant story, and by the time our friend fin-

ished reading, the librarian grabbed the book from her saying, "*I'm going to take $15 from our office supply budget and order this book immediately!*"

Sadly, many of the most wonderful books being written today, as well as the marvelous classics like *The Story About Ping* are being supplanted on limited library shelf space by books of far less merit. The library system is designed to respond to patron usage and requests. They buy and maintain what the most people are reading. One of our more subtle opportunities is to bless our communities with wholesome, solid books by requesting them, sharing them with local librarians, or even donating a copy of a special title from time to time. Our libraries are what we make them!

One final note on the titles of *Five in a Row*. We're well aware that some of the very best children's books ever written can sometimes be the most difficult to locate. While we struggled with this issue, in the final analysis we concluded that we wanted to offer the very *best* of the more than 7500 children's books we've explored and examined.

We've tried to give you the very "best of the best" from the thousands of children's books Jane has explored in the hopes that each one will be a present tense joy and a lifetime friend for both you and your children. God bless you and your children as you set out on the wonderful adventure of learning with *Five in a Row*.

FIVE IN A ROW

Designed for children from ages 7 to 8, *Five in a Row, Volume 4* provides a step-by-step, instructional guide for teaching Social Studies, Language, Art, Applied Math and Science using outstanding children's literature as the basis for each weekly unit study. Lessons include discussion guide and questions, teacher answers, hands-on activities and more.

What others are saying about *Five in a Row*

"*Five in a Row* is the perfect unit study for busy moms, especially those new to homeschooling. It's flexible: you can teach the books in any order; even within a week, the order of the activities is up to you. It's wonderful to use with the little ones while your older students are busy. For preschoolers and non-readers this program is all you need for a gentle introduction to "school." For the early elementary students who already have a reading and math program, *Five in a Row* does the rest." ♥♥♥♥♥ **Practical Homeschooling Magazine**

"*Five in a Row* is exactly what moms have been needing. It's simple to use, holds children's attention and brings them all close to you for some real learning, providing a wholesome, natural way to introduce children to books and all the treasures they hold." **Amanda Bennett**, Author of the *Unit Study Adventure Series*

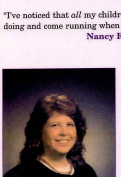
"I only wish Jane had written *Five in a Row* while my children were young enough to benefit from them! These books, along with Ruth Beechick's *The Three R's* and Susan Schaeffer Macaulay's *For the Children's Sake*, are my recommended package for beginning homeschoolers."
Diana Waring, Author of *Beyond Survival–A Guide to Abundant-Life Homeschooling*

"Mrs. Lambert's enthusiasm and delight for teaching are contagious! *Five in a Row* offers far more than a study of books. It affords us a fresh perspective for observing and enjoying all literature. Thank you for your inspiration, Jane."
Valerie Bendt, Author of *The Unit Study Idea Book*, and *For the Love of Reading*

"*Five in a Row* seems to be extremely user-friendly, especially for the inexperienced homeschooler."
Cathy Duffy, Author of *Christian Home Educator's Curriculum Manual*

"As I sat down this morning with my children to enjoy another reading of *The Story About Ping*, I was so taken with the calmness and joy that my children have each day as we continue our *Five in a Row* studies."
Kathy Ridpath, Raleigh, North Carolina

"I've noticed that *all* my children, from the 13-year-old down to the 22-month-old suddenly drop *whatever* they're doing and come running when mama sits down to read *Five in a Row*! These are very special moments!"
Nancy Robinson, Paw Paw, Michigan



With a grandmother who owned a private pre-school, a mother who taught first grade for more than 30 years and a father who taught at the college level, perhaps it was inevitable that Jane Claire Lambert would end up as an educator too. But Jane's teaching gifts found an outlet much closer to home. She began homeschooling her own children in 1982. Jane's 15 years of teaching experience and her lifelong love of children's literature have combined to give birth to *Before Five in a Row*, ages two through four and *Five in a Row*, ages four through eight.

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